

# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6083107

QC Batch Method: QC Batch: EPA 300.0 WETA/13590 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6083107001, 6083107002

METHOD BLANK: 681176 Matrix: Water

Associated Lab Samples:

Nitrate as N Parameter 6083107001, 6083107002 mg/L Units Result Blank R Reporting Limit 0.10 08/04/10 13:41 Analyzed Qualifiers

Nitrate as N LABORATORY CONTROL SAMPLE: 681177 Parameter mg/L Units Conc. Spike Ŋ Result LCS 5.0 % Rec LCS 100 % Rec Limits 90-110 Qualifiers

Nitrate as N MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 6083069001 Result 681178 R Spike Conc. NS. Ŋ Spike Conc. MSD Ŋ 681179 Result S 4.7 Result MSD 4.7 % Rec SN 94 MSD % Rec 94 Limits % Rec 68-120 RPD RPD 0 Max 16 Qual

Date: 08/16/2010 12:59 PM

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6083107

QC Batch Method: QC Batch: EPA 300.0 WETA/13652 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6083107001

METHOD BLANK: 683985 Matrix: Water

Fluoride Sulfate Associated Lab Samples: Parameter 6083107001 mg/L mg/L Units Result Blank  $\frac{1}{6}$ Reporting Limit 0.20 1.0 08/10/10 17:27 08/10/10 17:27 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L mg/L 683986 Units Conc. Spike 5 5 Result LCS 5.1 % Rec 102 102 Limits % Rec 90-110 90-110 Qualifiers

Fluoride Sulfate MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 6082877002 Result 683987 1500 R Spike Conc. S 1000 Spike Conc. MSD 100 1000 683988 Result SN 2460 97.1 Result MSD 96.8 2440 % Rec S 93 96 % Rec MSD 93 % Rec Limits 75-110 61-119 RPD <u>~</u> 0 RPD Max <del>10</del> <del>10</del> Qual

Fluoride Sulfate MATRIX SPIKE SAMPLE: Parameter mg/L mg/L 683989 Units 6083107001 Result 2.6 354 Spike Conc. 5 100 Result SN 7.5 475 % Rec SN 100 121 % Rec Limits 61-119 M0 75-110 Qualifiers

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# **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6083107

QC Batch Method: QC Batch: EPA 300.0 WETA/13661 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6083107002

METHOD BLANK: 684535 Matrix: Water

Fluoride Sulfate Associated Lab Samples: Parameter 6083107002 mg/L mg/L Units Blank Result  $\frac{1}{6}$ Reporting Limit 0.20 1.0 08/11/10 17:47 08/11/10 17:47 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L 684536 Units Conc. Spike 01 01 Result LCS 5.1 % Rec 102 101 Limits % Rec 90-110 90-110 Qualifiers

Fluoride Sulfate	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6082 Parameter Units
mg/L	IKE DUPLICAT 6 Units
N N	TE: 684537 082977002 Result
2500 2500	MS Spike Conc.
2500 2500	MSD Spike Conc.
2380 2620	684538 MS Result
2380 2560	MSD Result
95 93	MS % Rec
95 91	MSD % Rec
75-110 61-119	% Rec Limits
2 0	RPC
10	Max RPD
	Qual

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6083107

QC Batch Method: QC Batch: EPA 350.1 WETA/13595 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 6083107001, 6083107002

Associated Lab Samples: METHOD BLANK: 681486 6083107001, 6083107002 Blank Matrix: Water Reporting

Nitrogen, Ammonia Parameter mg/L Units Result R Limit 0.10 08/04/10 16:40 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 681487

Nitrogen, Ammonia Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 105 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 681488

Nitrogen, Ammonia Parameter mg/L Units 6082919002 Result ND Conc. Spike N Result  $S_{N}$ <u>-</u>2 % Rec SM 91 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 681490

Nitrogen, Ammonia Parameter mg/L Units 6083107002 Result 12.0 Spike Conc. N Result  $S_{N}$ 10.7 % Rec S -68 % Rec Limits 90-110 M0 Qualifiers

SAMPLE DUPLICATE: 681489

Nitrogen, Ammonia Parameter mg/L Units 6082950001 Result 30.3 Result Dup 32.7 RPD  $\infty$ Max RPD 8 Qualifiers

Date: 08/16/2010 12:59 PM

REPORT OF LABORATORY ANALYSIS



# **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6083107

QC Batch Method: QC Batch: EPA 365.4 WETA/13606 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 6083107001, 6083107002

Associated Lab Samples: METHOD BLANK: 682169 6083107001, 6083107002 Blank Matrix: Water Reporting

**Phosphorus** Parameter mg/L Units Result R Limit 0.10 08/06/10 19:33 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 682170

Phosphorus Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 104 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 682171

Phosphorus Parameter mg/L Units 6082700002 Result 17.0 Spike Conc.  $\infty$ Result SM 23.9 % Rec SM 86 % Rec Limits 72-121 Qualifiers

MATRIX SPIKE SAMPLE: 682173

Phosphorus Parameter mg/L Units 6082919001 Result 11.8 Spike Conc.  $\infty$ Result  $S_{N}$ 15.7 % Rec  $S_{N}$ 49 % Rec Limits 72-121 MO Qualifiers

SAMPLE DUPLICATE: 682172

Phosphorus mg/L	Parameter U	
	Units	
1.4	Result	
1.4	Result	7
3	RPD	
15	RPD	
	Qualifiers	

neac.



Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 6083107

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

U - Indicates the compound was analyzed for, but not detected

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

PASI-K Pace Analytical Services - Kansas City

#### **ANALYTE QUALIFIERS**

Analysis initiated more than 15 minutes after sample collection.

Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

nelac

September 21, 2010

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES
Pace Project No.: 6085009

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on September 07, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the

If you have any questions concerning this report, please feel free to contact me

Sincerely,

Sherri Guess

sherri.guess@pacelabs.com Project Manager

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 6085009

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665



#### SAMPLE SUMMARY

Project: MONTHLY NPDES 6085009

Pace Project No.:

Lab ID 6085009001	Sample ID	<b>Matrix</b> Water	Date Collected	Date Received 09/07/10 22:45
6085009001	SL001	Water	09/07/10 13:1	0
6085009002	WT003	Water	09/07/10 13:00	00





# SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES 6085009

Pace Project No.:

Lab ID Sample ID	Method	Analysts	Analytes Reported	Laboratory
6085009001 SL001	SM 2540D	EKN	1	PASI-K
	SM 4500-H+B	APS	_	PASI-K
	EPA 300.0	JML	_	PASI-K
	EPA 300.0	JML	2	PASI-K
	EPA 350.1	RAB	_	PASI-K
	EPA 365.4	AJM	_	PASI-K
6085009002 WT003	SM 2540D	EKN	_	PASI-K
	SM 4500-H+B	APS	_	PASI-K
	EPA 300.0	JML	_	PASI-K
	EPA 300.0	JML	2	PASI-K
	EPA 350.1	RAB	_	PASI-K
	EPA 365.4	MLA	_	PASI-K
		EPA 365.4		

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### **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 6085009

Sample: SI 001	1 ah ID: 6085009001		Collected: 00/07/10 13:10	10 13:10	Received: 09/07/10 22:45		Matriv: Water	
		,		7 - 1 - 2 -		_		) <u>i</u>
OFFICE CONTRACTOR COLLEGE		Application Mothod: CM 25/00	-					
Total Suspended Solids	<b>9.0</b> mg/L	ng/L	5.0	_		09/09/10 14:20		
4500H+ pH, Electrometric	Analytical Me	Analytical Method: SM 4500-H+B	H+B					
pH at 25 Degrees C	7.3 S	7.3 Std. Units	0.10	_		09/08/10 21:00		H6
300.0 IC Anions	Analytical Me	Analytical Method: EPA 300.0	0					
Nitrate as N	<b>3.1</b> mg/L	ng/L	0.10	_		09/08/10 12:21	14797-55-8	
300.0 IC Anions 28 Days	Analytical Me	Analytical Method: EPA 300.0	0					
Fluoride Sulfate	<b>3.5</b> mg/L <b>522</b> mg/L	ng/L ng/L	0.20 50.0	50		09/20/10 19:01 09/20/10 19:13	16984-48-8 14808-79-8	
350.1 Ammonia	Analytical Me	Analytical Method: EPA 350.1	_					
Nitrogen, Ammonia	<b>4.5</b> mg/L	ng/L	0.10	_		09/09/10 12:00	7664-41-7	
365.4 Total Phosphorus	Analytical Me	Analytical Method: EPA 365.4	42					
Phosphorus	<b>0.87</b> mg/L	ng/L	0.10	_		09/11/10 16:26	7723-14-0	
Sample: WT003	Lab ID: 6085009002		Collected: 09/07/10 13:00	10 13:00	Received: 09/07/10 22:45		Matrix: Water	
Parameters	Results	Units	Report Limit	PF	Prepared	Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Me	Analytical Method: SM 2540D	O					
Total Suspended Solids	<b>9.0</b> mg/L	ng/L	5.0	_		09/10/10 07:32		
4500H+ pH, Electrometric	Analytical Me	Analytical Method: SM 4500-H+B	H+B					
pH at 25 Degrees C	7.1 S	7.1 Std. Units	0.10	_		09/08/10 21:00		H6
300.0 IC Anions	Analytical Me	Analytical Method: EPA 300.0	0					
Nitrate as N	<b>3.7</b> mg/L	ng/L	0.10	_		09/08/10 11:45	14797-55-8	
300.0 IC Anions 28 Days	Analytical Me	Analytical Method: EPA 300.0	0					
Fluoride Sulfate	<b>4.7</b> mg/L <b>1030</b> mg/L	ng/L ng/L	0.20 50.0	50		09/20/10 20:38 09/20/10 20:51	16984-48-8 14808-79-8	
350.1 Ammonia	Analytical Me	Analytical Method: EPA 350.1	_					
Nitrogen, Ammonia	<b>12.1</b> mg/L	ng/L	0.50	_		09/09/10 12:02	7664-41-7	
365.4 Total Phosphorus	Analytical Me	Analytical Method: EPA 365.4	44					
Phosphorus	<b>6.7</b> mg/L	ng/L	0.20	_		09/11/10 16:43	7723-14-0	

Date: 09/21/2010 11:36 AM

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# **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6085009

QC Batch Method: QC Batch: SM 2540D WET/25315 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 6085009001

METHOD BLANK: 696972

Associated Lab Samples: Total Suspended Solids Parameter 6085009001 mg/L Units Blank Result Matrix: Water R Reporting Limit 5.0 09/09/10 14:20 Analyzed Qualifiers

SAMPLE DUPLICATE: 696973

Total Suspended Solids Parameter mg/L Units 6085014006 Result 14.0 Result Dup 14.0 RPD 0 Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 696974

Total Suspended Solids Parameter mg/L Units 6085041002 Result  $\frac{1}{2}$ Result Dup ND RPD Max RPD 25 Qualifiers

Date: 09/21/2010 11:36 AM

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# **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6085009

QC Batch Method: QC Batch: SM 2540D WET/25334 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 6085009002

METHOD BLANK: 697592

Associated Lab Samples: 6085009002 Units Blank Result Matrix: Water Reporting Limit

Total Suspended Solids Parameter mg/L R 5.0 09/10/10 07:30 Analyzed

Qualifiers

SAMPLE DUPLICATE: 697593

Total Suspended Solids Parameter mg/L Units 6085105001 Result 5.0 Result Dup 6.0 RPD Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 697594

Total Suspended Solids Parameter mg/L Units 6085011005 Result 86.0 Result Dup 87.0 RPD RPDMax 25 Qualifiers

Date: 09/21/2010 11:36 AM

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6085009

QC Batch Method: QC Batch: SM 4500-H+B WET/25308 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 6085009001, 6085009002

SAMPLE DUPLICATE: 696955

pH at 25 Degrees C Parameter Std. Units Units 6085010001 Result 8.0 Result Dup 8.0 RPD 0 Max RPD 5 H6 Qualifiers

Date: 09/21/2010 11:36 AM

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6085009

QC Batch Method: QC Batch: EPA 300.0 WETA/13919 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6085009001, 6085009002

METHOD BLANK: 696514 Matrix: Water

Nitrate as N Associated Lab Samples: Parameter 6085009001, 6085009002 mg/L Units Result Blank R Reporting Limit 0.10 09/08/10 09:55 Analyzed Qualifiers

Nitrate as N LABORATORY CONTROL SAMPLE: 696515 Parameter mg/L Units Conc. Spike Ŋ Result LCS 4.9 % Rec LCS 98 % Rec Limits 90-110 Qualifiers

Nitrate as N MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 6085007003 Result 696522 7.1 Spike Conc. NS. Ŋ Spike Conc. MSD Ŋ 696523 Result S 12.2 Result MSD 12.2 % Rec SN 102 % Rec MSD 102 Limits % Rec 68-120 RPD RPD 0 Max 16 Qual

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6085009

QC Batch Method: QC Batch: EPA 300.0 WETA/14022 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6085009001, 6085009002

Fluoride Sulfate Associated Lab Samples: METHOD BLANK: 702455 Parameter 6085009001, 6085009002 mg/L mg/L Units Blank Result Matrix: Water  $\frac{1}{6}$ Reporting Limit 0.20 1.0 09/20/10 16:23 09/20/10 16:23 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L 702456 Units Conc. Spike 01 01 Result LCS 4.9 5.1 LCS % Rec 99 102 Limits % Rec 90-110 90-110 Qualifiers

Fluoride Sulfate	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 702457 6085009001 Parameter Units Result
mg/L	PIKE DUPLICA: 6 Units
3.5 522	TE: 70245 6085009001 Result
5 250	7 MS Spike Conc.
5 250	MSD Spike Conc.
8.3 737	702458 MS Result
8.4 732	MSD Result
96 86	MS % Rec
97 84	MSD % Rec
75-110 61-119	% Rec Limits
	Max RPD RPD
10	
	Qual

Date: 09/21/2010 11:36 AM

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6085009

QC Batch Method: QC Batch: EPA 350.1 WETA/13930 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 6085009001, 6085009002

METHOD BLANK: 697020

Nitrogen, Ammonia Associated Lab Samples: Parameter 6085009001, 6085009002 mg/L Units Result Blank Matrix: Water R Reporting Limit 0.10 09/09/10 11:49 Analyzed Qualifiers

Nitrogen, Ammonia LABORATORY CONTROL SAMPLE: 697021 Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 106 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 697022 Units 6085007006 Result 0.26 Conc. Spike N Result SM <u>-</u>2 % Rec SM 78 % Rec Limits 90-110 M0 Qualifiers

SAMPLE DUPLICATE: 697023

Nitrogen, Ammonia	Parameter
mg/L	Units
4.5	6085009001 Result
4.6	Dup Result
2	RPD
18	Max RPD
	Qualifiers

Date: 09/21/2010 11:36 AM

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6085009

QC Batch Method: QC Batch: EPA 365.4 WETA/13945 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 6085009001, 6085009002

Associated Lab Samples: METHOD BLANK: 698249 Parameter 6085009001, 6085009002 Units Result Blank Matrix: Water Reporting Limit Analyzed

**Phosphorus** mg/L R 0.10 09/11/10 16:04

Qualifiers

LABORATORY CONTROL SAMPLE: 698250 Phosphorus Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 105 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: Parameter 698251 Units 6085073001 Result 16.5 Spike Conc. 6 Result SM 24.5 % Rec SM % Rec Limits Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 698253 Units 6085026001 Result ND Spike Conc. N Result  $S_{N}$ 2.2 % Rec SN 108 80 % Rec Limits 72-121 72-121 Qualifiers

Phosphorus mg/L

Phosphorus SAMPLE DUPLICATE: Parameter 698252 mg/L Units 6084801008 Result 93.9 Result Dup 91.5 RPD ω Max RPD 15 Qualifiers

Date: 09/21/2010 11:36 AM

REPORT OF LABORATORY ANALYSIS





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No .: 6085009

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

U - Indicates the compound was analyzed for, but not detected

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

PASI-K Pace Analytical Services - Kansas City

#### **ANALYTE QUALIFIERS**

Analysis initiated more than 15 minutes after sample collection.

Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

nelac



# CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

						12	11	10	9	8	7		6	6 4	6 0 4	6 4 4 4	8 4 4 B	6 6 4 6 2		Rege	Rec	Set Rea	Rec G C	Requested Due Dat Requested Due Dat Required C Required C Sample 4 4 5 6	Section Sectio	Section Sectio
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# Pace Analytical Client Name:

# Sample Condition Upon Receipt

Ft Mo Demiel

Project #

Date: 10.6				Project Manager Review:
				Comments/ Resolution:
	ime:	Date/Time:		Person Contacted:
Field Data Required? Y / N	Y)/ N		Copy COC to Client?	Client Notification/ Resolution: Copy (
	17. List State:	□No ·□MA	□Yes □No	Project sampled in USDA Regulated Area:
	16.	ZNIA	□Yes □No	Headspace in VOA vials ( >6mm):
				Pace Trip Blank lot # (if purchased):
	15.	Q. Mi∧	□Yes □No	Trip Blank present:
Lot # of added preservative	Initial when completed My		□Yes 9‰	Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics
		UNNA	Dres ,□No	All containers needing preservation are found to be in compliance with EPA recommendation.
	14.	0 □N/A 14.	Tres ONo	All containers needing preservation have been checked.
			<b>E</b> ,	-Includes date/time/ID/analyses Matrix:
	13.	□NNA	Dres □No	Sample labels match COC:
	12.		□Yes □No	Filtered volume received for dissolved tests
	11.	TAN A	□Yes □No	Unpreserved 5035A soils frozen w/in 48hrs?
	10.	□N⊮A	Dxes □No	Containers intact:
		□N/A	□Yes □No	-Pace containers used:
	9.	0 □N/A 9	DYes DNo	Correct containers used:
	8	0 □N/A 8	Dres □No	Sufficient volume:
	7.	i	□Yes ZiNo	Rush Turn Around Time requested:
3	6. pH, 102	<sub>9</sub> □N/A 6.	Dres □No,	Short Hold Time analyses (<72hr):
	5.	o □N/A 5	Dres □No	Samples arrived within holding time:
	4.	o DN/A	□res □No	Sampler name & signature on COC:
	3.	□N/A	Dres □No	Chain of Custody relinquished:
	2.		⊠Yes □No	Chain of Custody filled out:
	1.	□N/A	Çάγes □No	Chain of Custody present:
Date and Initials of derson examining contents: 10 16/10 (M	Comments:			Cooler Temperature: Ut
Samples on ice, cooling process has begun	Blue None	e: Wet	Type of Ice:	Thermometer Used: (T-197) / T-194
	None	Foam		Packing Material: Bubble Wrap Bubble Bags
□ [ 8	tact:	Seals intact:	□ :	al on Cooler/Box Present:
Optional  Yes No Proj. Due Date: / 3/12	Pace [	mercial abel Use	Client Acommercial Page Shipping Label Used?	Courier:
•			•	

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

October 15, 2010

PO Box 225 301 State Line Road Keith Brown
PCS Phosphate Company Inc. Joplin, MO 64802

RE: **Project: MONTHLY NPDES** Pace Project No.: 6086845

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 05, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the

If you have any questions concerning this report, please feel free to contact me

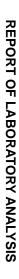
Sincerely,

Sherri Guess Slevi Ju

Project Manager sherri.guess@pacelabs.com

**Enclosures** 

Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust



Page 1 of 12



Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 6086845

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665





#### SAMPLE SUMMARY

Project: MONTHLY NPDES 6086845

Pace Project No.:

Matrix Water
Water



# SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES 6086845

Pace Project No.:

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
6086845001	SL001	SM 2540D	DSM	1	PASI-K
		SM 4500-H+B	JML	_	PASI-K
		EPA 300.0	RAB	_	PASI-K
		EPA 300.0	RAB	2	PASI-K
		EPA 350.1	AJM	_	PASI-K
		EPA 365.4	AJM	_	PASI-K
6086845002	WT001	SM 2540D	DSM	_	PASI-K
		SM 4500-H+B	JML	_	PASI-K
		EPA 300.0	RAB	_	PASI-K
		EPA 300.0	RAB	2	PASI-K
		EPA 350.1	AJM	_	PASI-K
		EPA 365.4	AJM	_	PASI-K

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### **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 6086845

Sample: SL001	Lab ID: 6086845001	01 Collected: 10/04/10 17:30	10 17:30	Received:	10/05/10 22:45 N	Matrix: Water	
Parameters	Results	Units Report Limit	PF	Prepared	Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	M 2540D					
Total Suspended Solids	<b>7.0</b> mg/L	5.0			10/07/10 17:10		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	M 4500-H+B					
pH at 25 Degrees C	<b>7.3</b> Std. Units	s 0.10	_		10/06/10 15:00		H6
300.0 IC Anions	Analytical Method: EPA 300.0	PA 300.0					
Nitrate as N	<b>3.1</b> mg/L	0.10			10/06/10 13:00	14797-55-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	PA 300.0					
Fluoride Sulfate	<b>2.7</b> mg/L <b>304</b> mg/L	0.20 50.0	50		10/08/10 15:08 10/08/10 15:23	16984-48-8 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	PA 350.1					
Nitrogen, Ammonia	<b>3.2</b> mg/L	0.10	_		10/14/10 18:44	7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	PA 365.4					
Phosphorus	<b>0.74</b> mg/L	0.10	_		10/12/10 18:53	7723-14-0	
Sample: WT001	Lab ID: 6086845002	02 Collected: 10/04/10 17:15	10 17:15	Received:	10/05/10 22:45 N	Matrix: Water	
Parameters	Results U	Units Report Limit	무	Prepared	Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	M 2540D					
Total Suspended Solids	<b>7.0</b> mg/L	5.0	_		10/07/10 17:11		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	M 4500-H+B					
pH at 25 Degrees C	8.0 Std. Units	ts 0.10	_		10/06/10 15:00		H6
300.0 IC Anions	Analytical Method: EPA 300.0	PA 300.0					
Nitrate as N	<b>5.5</b> mg/L	0.10	_		10/06/10 12:11	14797-55-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	PA 300.0					
Fluoride Sulfate	<b>7.8</b> mg/L <b>705</b> mg/L	0.20 100	100		10/08/10 16:08 10/08/10 16:24	16984-48-8 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	PA 350.1					
Nitrogen, Ammonia	<b>11.6</b> mg/L	1.0	_		10/14/10 19:06	7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	PA 365.4					
Phosphorus	<b>0.21</b> mg/L	0.10	_		10/12/10 18:55	7723-14-0	

Date: 10/15/2010 09:26 AM

REPORT OF LABORATORY ANALYSIS

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# **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6086845

QC Batch Method: QC Batch: SM 2540D WET/25828 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 6086845001, 6086845002

Associated Lab Samples: Total Suspended Solids METHOD BLANK: 713976 Parameter 6086845001, 6086845002 mg/L Units Blank Result Matrix: Water R Reporting Limit 5.0 10/07/10 17:08 Analyzed Qualifiers

SAMPLE DUPLICATE: 713977

Total Suspended Solids Parameter mg/L Units 6086793001 Result 5.0 Result Dup 8.0 RPD Max RPD 25 Qualifiers

	25	11	10	9.0	mg/L	Total Suspended Solids
Qualifiers	RPD	RPD	Result	Result	Units	Parameter
			7			
						SAMPLE DLIPLICATE: 713078

Date: 10/15/2010 09:26 AM

REPORT OF LABORATORY ANALYSIS

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6086845

QC Batch Method: QC Batch: SM 4500-H+B WET/25811 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 6086845001, 6086845002

SAMPLE DUPLICATE: 713286 6086845002 Dup

pH at 25 Degrees C Parameter Std. Units Units Result 8.0 Result 8.0 RPD 0 Max RPD 5 H6 Qualifiers

Date: 10/15/2010 09:26 AM

REPORT OF LABORATORY ANALYSIS

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6086845

QC Batch Method: QC Batch: EPA 300.0 WETA/14266 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6086845001, 6086845002

Associated Lab Samples: METHOD BLANK: 712753 6086845001, 6086845002 Blank Matrix: Water Reporting

Nitrate as N Parameter mg/L Units Result R Limit 0.10 10/06/10 11:38 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 712754

Nitrate as N Parameter mg/L Units Conc. Spike Ŋ Result LCS 5.0 % Rec LCS 100 % Rec Limits 90-110 Qualifiers

Nitrate as N Parameter mg/L Units 6086841003 Result R Spike Conc. NS. 5 Spike Conc. MSD Ŋ Result S 4.8 Result MSD 4.6 % Rec S 96 MSD % Rec 92 Limits % Rec 68-120 RPD RPD 4 Max 16 Qual

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

712755

712756

Nitrate as N	Parameter	MAI XIX UTIKE UAMTLE:
mg/L	Units	89/71.7
0.90	Result	6006846004
5	Conc.	5
5.5	Result	No.
93	% Rec	Mo
68-120	Limits	0 D
	Qualifiers	

Date: 10/15/2010 09:26 AM

REPORT OF LABORATORY ANALYSIS

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# **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6086845

QC Batch Method: QC Batch: EPA 300.0 WETA/14299 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6086845001, 6086845002

Fluoride Sulfate Associated Lab Samples: METHOD BLANK: 714378 Parameter 6086845001, 6086845002 mg/L mg/L Units Blank Result Matrix: Water  $\frac{1}{6}$ Reporting Limit 0.20 1.0 10/08/10 11:51 10/08/10 11:51 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L 714379 Units Conc. Spike 01 01 Result LCS 4.9 4.5 LCS % Rec 97 90 Limits % Rec 90-110 90-110 Qualifiers

Fluoride Sulfate	Parameter			MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 714380
mg/L	Units	60		KE DUPLICATE
ND 99.9	Result	086937002		<u>=</u> : 71438
50 50	Conc.	Spike	SM	0
50 50	Conc.	Spike	MSD	
49.4 144	Result	MS		714381
48.6 145	Result	MSD		
96 89	% Rec	MS		
94 91	% Rec	MSD		
75-110 61-119	Limits	% Rec		
1 2	RPD RPD	_		
10	1	Max		
	Qual			

Date: 10/15/2010 09:26 AM

REPORT OF LABORATORY ANALYSIS

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6086845

QC Batch Method: QC Batch: EPA 350.1 WETA/14390 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 6086845001, 6086845002

METHOD BLANK: 717888 Matrix: Water

6086845001, 6086845002

Nitrogen, Ammonia Associated Lab Samples: Parameter mg/L Units Result Blank R Reporting Limit 0.10 10/14/10 18:15 Analyzed Qualifiers

Nitrogen, Ammonia LABORATORY CONTROL SAMPLE: Parameter 717889 mg/L Units Conc. Spike N Result LCS 2.2 % Rec LCS 110 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 717890 Units 6086617001 Result 15.3 Spike Conc. 6 Result SM 24.5 % Rec SM 92 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 717892 Units 6086951002 Result ND Spike Conc. N Result  $S_{N}$ 2.3 % Rec  $S_{N}$ 115 % Rec Limits 90-110 M0 Qualifiers

SAMPLE DUPLICATE: 717891

Nitrogen, Ammonia	Parameter	
mg/L	Units	
ND	6086858001 Result	
ND	Dup Result	
	RPD	
18	Max RPD	
ω	Qualifiers	

Date: 10/15/2010 09:26 AM

REPORT OF LABORATORY ANALYSIS

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# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6086845

QC Batch Method: QC Batch: EPA 365.4 WETA/14316 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 6086845001, 6086845002

METHOD BLANK: 715274

Associated Lab Samples: 6086845001, 6086845002

**Phosphorus** Parameter mg/L Units Result Blank Matrix: Water R Reporting Limit 0.10 10/12/10 18:09 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 715275

Phosphorus Parameter mg/L Units Conc. Spike N Result LCS 1.9 % Rec LCS 97 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 715276

Phosphorus Parameter mg/L Units 6086932002 Result 2.0 Spike Conc. N Result  $S_{N}$ 3. 8 % Rec SM 91 % Rec Limits 72-121 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 715278 Units 6086906002 Result 0.85 Spike Conc. N Result  $S_{N}$ 2.7 % Rec SN 94 % Rec Limits 72-121 Qualifiers

SAMPLE DUPLICATE: 715277

Phosphorus Parameter mg/L Units 6086751001 Result 0.80 Result Dup 0.81 RPD Max RPD 15 Qualifiers

Date: 10/15/2010 09:26 AM

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No .: 6086845

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

U - Indicates the compound was analyzed for, but not detected

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

PASI-K Pace Analytical Services - Kansas City

#### **ANALYTE QUALIFIERS**

Analysis initiated more than 15 minutes after sample collection.

Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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nelac

November 16, 2010

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES 11/1/10

Page Project No : 6088540

Pace Project No.: 6088540

Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 02, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the

If you have any questions concerning this report, please feel free to contact me

Sincerely,

Sherri Guess

sherri.guess@pacelabs.com Project Manager

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust

REPORT OF LABORATORY ANALYSIS

Page 1 of 12



Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES 11/1/10

Pace Project No.: 6088540

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

REPORT OF LABORATORY ANALYSIS

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#### SAMPLE SUMMARY

Project: MONTHLY NPDES 11/1/10 6088540

Pace Project No.:

6088540002 W	6088540001 S	Lab ID S
WT003	1 SL001	Sample ID
Water	Water	Matrix
11/01/10 17:30	11/01/10 17:40	Date Collected
11/02/10 22:05	11/02/10 22:05	Date Received

REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES 11/1/10 6088540

Pace Project No.:

Sample ID	Method	Analysts	Analytes Reported	Laboratory
SL001	SM 2540D	SRM1	1	PASI-K
	SM 4500-H+B	JPF	_	PASI-K
	EPA 300.0	JML		PASI-K
	EPA 300.0	JML	2	PASI-K
	EPA 350.1	AJM	_	PASI-K
	EPA 365.4	AJM	_	PASI-K
WT003	SM 2540D	SRM1	_	PASI-K
	SM 4500-H+B	JPF	_	PASI-K
	EPA 300.0	JML	_	PASI-K
	EPA 300.0	JML	2	PASI-K
	EPA 350.1	AJM	_	PASI-K
	EPA 365.4	AJM	_	PASI-K
	SL001 WT003		Method  SM 2540D  SM 4500-H+B  EPA 300.0  EPA 300.0  EPA 365.4  SM 2540D  SM 2540D  SM 4500-H+B  EPA 300.0  EPA 300.0  EPA 300.0  EPA 365.4  EPA 365.4	eiD         Method         Analysts         I           SM 2540D         SRM1           SM 4500-H+B         JPF           EPA 300.0         JML           EPA 350.1         AJM           EPA 365.4         AJM           SM 2540D         SRM1           SM 2540D         SRM1           SM 4500-H+B         JPF           EPA 300.0         JML           EPA 300.0         JML           EPA 350.1         AJM           EPA 355.4         AJM

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#### ANALYTICAL RESULTS

Project: MONTHLY NPDES 11/1/10

Pace Project No.: 6088540

Sample: SL001	Lab ID: 6088540001	Collected: 11/01/10 17:40	17:40 Received:	11/02/10 22:05	Matrix: Water	
Parameters	Results Units	Report Limit I	DF Prepared	ared Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	,OD				
Total Suspended Solids	ND mg/L	5.0	<b>→</b>	11/04/10 12:44	42	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	)0-H+B				
pH at 25 Degrees C	<b>7.2</b> Std. Units	0.10	_	11/03/10 16:15	OI .	H6
300.0 IC Anions	Analytical Method: EPA 300.0	0.0				
Nitrate as N	<b>3.6</b> mg/L	0.10	_	11/03/10 15:32	2 14797-55-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	0.0				
Fluoride Sulfate	<b>2.8</b> mg/L <b>308</b> mg/L	0.20 100 1	100	11/15/10 18:30 11/15/10 18:45	) 16984-48-8 5 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	0.1				
Nitrogen, Ammonia	<b>2.4</b> mg/L	0.10	_	11/10/10 14:25	5 7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	5.4				
Phosphorus	<b>0.50</b> mg/L	0.10	_	11/09/10 16:31	1 7723-14-0	
Sample: WT003	Lab ID: 6088540002	Collected: 11/01/10 17:30	17:30 Received:	11/02/10 22:05	Matrix: Water	
Parameters	Results Units	Report Limit I	DF Prepared	ared Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	,0D				
Total Suspended Solids	ND mg/L	5.0	_	11/04/10 12:44	4	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	)0-H+B				
pH at 25 Degrees C	6.5 Std. Units	0.10		11/03/10 16:15	Oi .	H6
300.0 IC Anions	Analytical Method: EPA 300.0	0.0				
Nitrate as N	<b>4.9</b> mg/L	0.10	_	11/03/10 15:16	6 14797-55-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	0.0				
Fluoride Sulfate	<b>5.6</b> mg/L <b>783</b> mg/L	0.20 200 <i>2</i>	1 200	11/15/10 19:00 11/15/10 19:15	16984-48-8 5 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	0.1				
Nitrogen, Ammonia	<b>9.0</b> mg/L	0.50	_	11/10/10 14:36	5 7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	5.4				
Phosphorus	<b>0.30</b> mg/L	0.10		11/09/10 16:32	2 7723-14-0	

Date: 11/16/2010 10:15 AM

REPORT OF LABORATORY ANALYSIS

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## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES 11/1/10

Pace Project No.: 6088540

QC Batch Method: QC Batch: SM 2540D WET/26296 Analysis Description: Analysis Method: SM 2540D

2540D Total Suspended Solids

Associated Lab Samples: 6088540001, 6088540002

METHOD BLANK: 730409 Matrix: Water

Associated Lab Samples: Parameter 6088540001, 6088540002 Units Blank Result Reporting Limit Analyzed Qualifiers

Total Suspended Solids

mg/L

R

5.0

11/04/10 12:42

SAMPLE DUPLICATE: 730410

Total Suspended Solids Parameter mg/L Units 6088539001 Result 216 Result Dup 212 RPD Ν Max RPD 25 Qualifiers

Total Suspended Solids SAMPLE DUPLICATE: Parameter 730411 mg/L Units 6088555002 Result  $\frac{1}{2}$ Result Dup ND RPD Max RPD 25

Qualifiers

Date: 11/16/2010 10:15 AM

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## QUALITY CONTROL DATA

Project: MONTHLY NPDES 11/1/10

Pace Project No.: 6088540

QC Batch Method: QC Batch: SM 4500-H+B WET/26283 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 6088540001, 6088540002

pH at 25 Degrees C SAMPLE DUPLICATE: 729876 Parameter Std. Units Units 6088539002 Result 8.4 Result Dup 8.4 RPD 0 Max RPD 5 H6 Qualifiers

Date: 11/16/2010 10:15 AM

REPORT OF LABORATORY ANALYSIS

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#### **QUALITY CONTROL DATA**

Project: MONTHLY NPDES 11/1/10

Pace Project No.: 6088540

QC Batch Method: QC Batch: EPA 300.0 WETA/14619 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6088540001, 6088540002

METHOD BLANK: 729809 Matrix: Water

Nitrate as N Associated Lab Samples: Parameter 6088540001, 6088540002 mg/L Units Result Blank R Reporting Limit 0.10 11/03/10 16:17 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: Parameter 729810 Units Conc. Spike Result LCS % Rec LCS % Rec Limits Qualifiers

Nitrate as N

mg/L

S

5.0

<u>1</u>

90-110

Nitrate as N MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 6088564001 Result 729811 39.6 Spike Conc. NS. 50 Spike Conc. MSD 50 729812 Result S 89.3 Result MSD 90.1 % Rec S 99 % Rec MSD 3 % Rec Limits 68-120 RPD RPD \_ Max 16

Nitrate as N MATRIX SPIKE SAMPLE: Parameter mg/L 729813 Units 6088504001 Result 1020 Spike Conc. 500 Result SN 1640 % Rec SN 124 % Rec Limits 68-120 M0 Qualifiers Qual

Date: 11/16/2010 10:15 AM

REPORT OF LABORATORY ANALYSIS

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## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES 11/1/10

Pace Project No.: 6088540

QC Batch Method: QC Batch: EPA 300.0 WETA/14740 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6088540001, 6088540002

Fluoride Sulfate Associated Lab Samples: METHOD BLANK: 736062 Parameter 6088540001, 6088540002 mg/L mg/L Units Blank Result Matrix: Water  $\frac{1}{6}$ Reporting Limit 0.20 <u>.</u>0 11/15/10 17:14 11/15/10 17:14 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L 736063 Units Conc. Spike 01 01 Result LCS 5.0 4.7 % Rec 100 95 Limits % Rec 90-110 90-110 Qualifiers

Fluoride Sulfate	Parameter		MATRIX SPIKE & MATRIX SPIKE DUPLICATE:
mg/L mg/L	Units	60	IKE DUPLICAT
ND 136		3088478006	E: 736064
50 50	Conc.	MS Spike	4
50 50	Conc.	MSD Spike	
46.4 179	Result	MS	736065
47.0 181		MSD	
91 84	% Rec	MS	
92 89	% Rec	MSD	
75-110 61-119	Limits	% Rec	
1 10	RPD RPD		
	Qual		

Date: 11/16/2010 10:15 AM

REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: MONTHLY NPDES 11/1/10

Pace Project No.: 6088540

QC Batch Method: QC Batch: EPA 350.1 WETA/14691 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 6088540001, 6088540002

Associated Lab Samples: METHOD BLANK: 733187 Parameter 6088540001, 6088540002 Units Result Blank Matrix: Water Reporting Limit Analyzed

Nitrogen, Ammonia mg/L R 0.10 11/10/10 13:58

Qualifiers

LABORATORY CONTROL SAMPLE: Parameter 733188 Units Conc. Spike Result LCS % Rec LCS % Rec Limits Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: mg/L 733190 N 2.0 101 90-110

Nitrogen, Ammonia Parameter mg/L Units 6088712002 Result ND Conc. Spike N Result  $S_{N}$ <u>.</u> % Rec SM 64 % Rec Limits 90-110 M0 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 733191 Units 6088496002 Result ND Spike Conc. N Result  $S_{N}$ 1.9 % Rec SN 97 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia SAMPLE DUPLICATE: Parameter 733189 mg/L Units 6088872001 Result 4640 Result Dup 4600 RPD Max RPD 8 Qualifiers

Date: 11/16/2010 10:15 AM

REPORT OF LABORATORY ANALYSIS



## QUALITY CONTROL DATA

Project: MONTHLY NPDES 11/1/10

Pace Project No.: 6088540

QC Batch Method: QC Batch: EPA 365.4 WETA/14642 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 6088540001, 6088540002

METHOD BLANK: 730482 Matrix: Water

**Phosphorus** Associated Lab Samples: Parameter 6088540001, 6088540002 mg/L Units Result Blank R Reporting Limit 0.10 11/09/10 16:04 Analyzed Qualifiers

Phosphorus LABORATORY CONTROL SAMPLE: Parameter 730483 mg/L Units Conc. Spike N Result LCS 2.0 % Rec LCS 100 % Rec Limits 90-110 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 730485 Units 6088299002 Result 2.9 Spike Conc. N Result SM 3.7 % Rec SM 4 % Rec Limits 72-121 M0 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 730486 Units 6088244001 Result ND Spike Conc. N Result  $S_{N}$ 0.47 % Rec SN 23 % Rec Limits 72-121 MO Qualifiers

SAMPLE DUPLICATE: 730484

Phosphorus	Parameter
mg/L	Units
ND	6088251001 Result
ND	Dup Result
	RPD
15	Max RPD
	Qualifiers

neac.



Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES 11/1/10

Pace Project No .: 6088540

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

U - Indicates the compound was analyzed for, but not detected

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

PASI-K Pace Analytical Services - Kansas City

#### **ANALYTE QUALIFIERS**

Analysis initiated more than 15 minutes after sample collection.

Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.



# CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Received Ice (Y/I ustody S Codler (Y	Temp in		12/		řed	DATE Signed	DAT	$\neg$	11	8 1	) B	1/2	1/2		Ž   ?	SAMPLE	SIGNATURE of SAMPLER:	SIGN											
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Residual Chlorine (Y/N)			mmonia	. Phosphorus	Sulfate	. Suspended Solids	)H	I Analysis Test↓	Methanol Other	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	NaOH	HNO₃ HCI	H₂SO₄	# OF CONTAINERS Unpreserved	SAMPLE TEMP AT COLLECTION	Me	COMPOSITE COMPOSITE CADIGRAB		COMPOSITE START  TIME	CON	SAMPLE TYPE (G=GRAB C=0	MATRIX CODE (see valid code	TS T	WATER WAY WASTE WATER WW PRODUCT P SOIUSOLID SL OIL OIL OIL OIL OIL OIL OIL OIL OIL OI		E ID	SAMPLE ID (A-Z, 0-9 /,-) Sample IDs MUST BE UNIQUE	Sampl	ITEM#
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## Sample Condition Upon Receipt



Client Name: 12 Rend Project #

(209362)

2

d:   Dives Philo Chuia 6.	Shain of Custody relinquished: Д́Yes □No □N/A 3. Sampler name & signature on COC: Д́Yes □No □N/A 4. Samples arrived within holding time: □Yes Д̂No □N/A 5. ゾウァ ていとっより よりと		Courier: Fed Ex UPS USPS Client Commercial Pace Other Fed Ex Optional  Fracking #: Pace Shipping Label Used? Yes No  Sustody Seal on Cooler/Box Present: Yes No Seals intact: Yes No  Proj. Due Date: Proj. Due Date: Proj. Name: 2/c/  Proj. Name: 2/c/  Proj. Due Date: Proj. Name: 2/c/  Proj. Name: 2/c/  Proj. Name: 2/c/  Proj. Name: 2/c/  Proj. Name: 2/c/  Proj. Due Date: Proj. Name: 2/c/  Proj. Date and Initials of person examining contents: Oc. (/24/c)
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Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

February 04, 2011

PO Box 225 301 State Line Road Keith Brown
PCS Phosphate Company Inc. Joplin, MO 64802

RE: **Project: MONTHLY NPDES** Pace Project No.: 6092621

Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the

If you have any questions concerning this report, please feel free to contact me

Sincerely,

Slewi Ju

Sherri Guess

Project Manager sherri.guess@pacelabs.com

**Enclosures** 

Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust

REPORT OF LABORATORY ANALYSIS

Page 1 of 12



Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 6092621

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665





#### SAMPLE SUMMARY

Project: MONTHLY NPDES 6092621

Pace Project No.:

Date Collected 01/18/11 14:30



## SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES 6092621

Pace Project No.:

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
6092621001	SL001	SM 2540D	JPF	1	PASI-K
		SM 4500-H+B	CMG	_	PASI-K
		EPA 300.0	JML	_	PASI-K
		EPA 300.0	JML	2	PASI-K
		EPA 350.1	AJM	_	PASI-K
		EPA 365.4	RAB	_	PASI-K
6092621002	WT003	SM 2540D	JPF	_	PASI-K
		SM 4500-H+B	CMG	_	PASI-K
		EPA 300.0	JML	_	PASI-K
		EPA 300.0	JML	2	PASI-K
		EPA 350.1	AJM	_	PASI-K
		EPA 365.4	RAB	_	PASI-K





#### **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 6092621

Sample: SL001	Lab ID: 6092621001	1 Collected: 01/18/11 14:30	11 14:30	Received: 01/21/11 22:45		Matrix: Water	
Parameters	Results Units	ts Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	2540D					
Total Suspended Solids	ND mg/L	5.0	<b>-</b>		01/24/11 12:48		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	4500-H+B					
pH at 25 Degrees C	7.8 Std. Units	0.10	_		01/22/11 11:20		H6
300.0 IC Anions	Analytical Method: EPA 300.0	A 300.0					
Nitrate as N	<b>1.0</b> mg/L	0.10	_		02/02/11 11:20	14797-55-8	<u>∓</u>
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	A 300.0					
Fluoride Sulfate	<b>1.1</b> mg/L <b>153</b> mg/L	0.20 20.0	20		02/02/11 11:20 02/02/11 11:34	16984-48-8 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	A 350.1					
Nitrogen, Ammonia	<b>1.5</b> mg/L	0.10	_		02/01/11 13:32	7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	A 365.4					
Phosphorus	<b>0.38</b> mg/L	0.10	_		01/25/11 11:38	7723-14-0	
Sample: WT003	Lab ID: 6092621002	2 Collected: 01/18/11 14:20	11 14:20	Received: 01/2	01/21/11 22:45 M	Matrix: Water	
Parameters	Results Units	ts Report Limit	PF	Prepared	Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	2540D					
Total Suspended Solids	ND mg/L	5.0	<b>-</b>		01/24/11 12:48		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	4500-H+B					
pH at 25 Degrees C	6.7 Std. Units	0.10	_		01/22/11 11:20		H6
300.0 IC Anions	Analytical Method: EPA 300.0	A 300.0					
Nitrate as N	<b>3.8</b> mg/L	0.10	_		02/02/11 12:42	14797-55-8	<u> </u>
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	A 300.0					
Fluoride Sulfate	<b>5.6</b> mg/L <b>693</b> mg/L	0.20 50.0	50		02/02/11 12:42 02/02/11 12:56	16984-48-8 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	A 350.1					
Nitrogen, Ammonia	<b>12.0</b> mg/L	0.50	_		02/01/11 13:33	7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	A 365.4					
Phosphorus	<b>0.11</b> mg/L	0.10	_		01/25/11 11:39	7723-14-0	

Date: 02/04/2011 10:24 AM

REPORT OF LABORATORY ANALYSIS





## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6092621

QC Batch Method: QC Batch: SM 2540D WET/27378 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 6092621001, 6092621002

Associated Lab Samples: Total Suspended Solids METHOD BLANK: 763253 Parameter 6092621001, 6092621002 mg/L Units Blank Result Matrix: Water R Reporting Limit 5.0 01/24/11 12:46 Analyzed Qualifiers

SAMPLE DUPLICATE: 763254

Total Suspended Solids Parameter mg/L Units 6092590001 Result 11.0 Result Dup 6 RPD 10 Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 763255

Total Suspended Solids Parameter mg/L Units 6092504006 Result  $\frac{1}{2}$ Result Dup ND RPD Max RPD 25 Qualifiers

Date: 02/04/2011 10:24 AM

REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6092621

QC Batch Method: QC Batch: SM 4500-H+B WET/27370 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

SAMPLE DUPLICATE: 763070

Associated Lab Samples: 6092621001, 6092621002

pH at 25 Degrees C Parameter Std. Units Units 6092622001 Result 7.9 Result Dup 7.9 RPD 0 Max RPD 5 H6 Qualifiers

Date: 02/04/2011 10:24 AM

REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6092621

QC Batch Method: QC Batch: EPA 300.0 WETA/15378 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6092621001, 6092621002

Associated Lab Samples: METHOD BLANK: 767178 6092621001, 6092621002 Matrix: Water

Nitrate as N Parameter mg/L Units Result Blank R Reporting Limit 0.10 02/02/11 10:26 Analyzed Qualifiers

Nitrate as N LABORATORY CONTROL SAMPLE: 767179 Parameter mg/L Units Conc. Spike Ŋ Result LCS 4.7 % Rec LCS 94 % Rec Limits 90-110 Qualifiers

Nitrate as N MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 6092621001 Result 767180 1.0 Spike Conc. SN Ŋ Spike Conc. MSD Ŋ 767181 Result S S 5.5 Result MSD 5.4 % Rec SN 90 MSD % Rec 89 Limits % Rec 68-120 RPD RPD \_ Max 16 Qual

Date: 02/04/2011 10:24 AM

REPORT OF LABORATORY ANALYSIS

Page 8 of 12





### **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6092621

QC Batch Method: QC Batch: EPA 300.0 WETA/15353 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6092621001, 6092621002

Fluoride Sulfate Associated Lab Samples: METHOD BLANK: 766581 Parameter 6092621001, 6092621002 mg/L mg/L Units Blank Result Matrix: Water  $\frac{1}{6}$ Reporting Limit 0.20 1.0 02/02/11 10:26 02/02/11 10:26 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L 766582 Units Conc. Spike 01 01 Result LCS 4.7 4.7 LCS % Rec 94 95 Limits % Rec 90-110 90-110 Qualifiers

Fluoride Sulfate	Parameter	MATRIX SPIKE & MATRIX SPIKE DUPLICATE:
mg/L	60 Units	IKE DUPLICAT
1.1 153	092621001 Result	E: 766583
5 100	MS Spike Conc.	3
5 100	MSD Spike Conc.	
5.5 242	MS Result	766584
5.5 240	MSD Result	
89 89	MS % Rec	
88	MSD % Rec	
75-110 61-119	% Rec Limits	
1 10	Max RPD RPD	
	Qual	

Date: 02/04/2011 10:24 AM

REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6092621

QC Batch Method: QC Batch: EPA 350.1 WETA/15342 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 6092621001, 6092621002

METHOD BLANK: 766390

Nitrogen, Ammonia Associated Lab Samples: Parameter 6092621001, 6092621002 mg/L Units Result Blank Matrix: Water R Reporting Limit 0.10 02/01/11 13:20 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 766391

Nitrogen, Ammonia Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 107 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 766393 Units 6092537001 Result 0.20 Spike Conc. N Result  $S_{N}$ 2.0 % Rec SM 89 % Rec Limits 90-110 M0 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 766394 Units 6092852001 Result ND Spike Conc. N Result  $S_{N}$ 1.9 % Rec SN 93 % Rec Limits 90-110 Qualifiers

SAMPLE DUPLICATE: 766392

Nitrogen, Ammonia Parameter mg/L Units 6092536001 Result <u>4</u>.1 Result Dup RPD Max RPD 8 Qualifiers

Date: 02/04/2011 10:24 AM

REPORT OF LABORATORY ANALYSIS

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## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6092621

QC Batch: WETA/15275 Analysis Method: 365.4 Phosphorus EPA 365.4

QC Batch Method: Associated Lab Samples: 6092621001, 6092621002 EPA 365.4 Analysis Description:

METHOD BLANK: 763222 Matrix: Water

Associated Lab Samples: 6092621001, 6092621002

**Phosphorus** Parameter mg/L Units Result Blank R Reporting Limit 0.10 01/25/11 11:13 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 763223 Spike LCS LCS

Phosphorus Parameter mg/L Units Conc. N Result 2.1 % Rec 106 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 763224 6092473001 Spike Conc. SM SM % Rec Qualifiers

Phosphorus Parameter mg/L Units Result 1.5 N Result 3.6 % Rec 105 Limits 72-121

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 763226 Units 6092545002 Result 7.1 Conc. Spike 6 Result  $S_{N}$ 16.4 % Rec  $S_{N}$ 93 % Rec Limits 72-121 Qualifiers

SAMPLE DUPLICATE: 763225

		Parameter
Result	Result	Units Result

Date: 02/04/2011 10:24 AM

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 6092621

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. each analyte is a combined concentration. The result reported for

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

Pace Analytical Services - Kansas City

#### **ANALYTE QUALIFIERS**

포 Analysis conducted outside the EPA method holding time.

Analysis initiated more than 15 minutes after sample collection.

Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

Date: 02/04/2011 10:24 AM



# CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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#### Pace Analytical\*

## Sample Condition Upon Receipt

Date: 2.16.10		Project Manager Review:
		Comments/ Resolution:
Date/Time:	Date	Person Contacted:
Y N Field Data Required? Y / N	Copy COC to Client?	ป Resolution:
17. List State:	□Yes □No ⊡NIA	Project sampled in USDA Regulated Area:
A 16.	□Yes □No ZÎN/A	Headspace in VOA vials ( >6mm):
		Pace Trip Blank lot # (if purchased):
15.	□Yes □No ☑NIA	Trip Blank present:
initial when Lot # of added completed preservative	□Yes ⊉No	Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics
A	Ores □No □N/A	All containers needing preservation are found to be in compliance with EPA recommendation.
□N/A 14.	Dres ONO ON	All containers needing preservation have been checked.
	5	-Includes date/time/ID/analyses Matrix:
□N/A 13.	TYes DNO DN	Sample labels match COC:
/4 12.	□Yes □No DANA	Filtered volume received for dissolved tests
Iny 11.	□Yes □No ☑N	Unpreserved 5035A soils frozen w/in 48hrs?
10.	Jayes □No □N/A	Containers intact:
I/A	'∐Yes □No □N/A	-Pace containers used:
□N/A 9.		Correct containers used:
□N/A 8.	Dayes ONO ON	Sufficient volume:
□N/A 7.	□Yes ZNo □N	Rush Turn Around Time requested:
DNA 6. NO.3 . PH	Dres OND ON	Short Hold Time analyses (<72hr):
□Ņ/A 5.	DYes ONO ON	Samples arrived within holding time:
4.	Yes □No □N/A	Sampler name & signature on COC:
□N/A 3.		Chain of Custody relinquished:
□N/A 2.	□No	Chain of Custody filled out:
□N/A 1.	ØYes □No □N	Chain of Custody present:
Comments:		Cooler Temperature:
Type of Ice Wet Blue None Samples on ice, cooling process has begun	Type of Ice ( W	Thermometer Used: (I-191) T-194
Plone Dther	Bags Foam	Packing Material: Вивые Wrap Вubble Вags
tact: Yes 🗌 No	□ <u>N</u>	Custody Seal on Cooler/Box Present: Yes
sed? Upes No Proj. Due Date: 3/,	Client Commercial Pace	Courier:
Wo Klimaility roject # Co93598	11	/ Wind pacelabs.com Client Name:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

March 01, 2011

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES Pace Project No.: 6093598

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on February 15, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the

If you have any questions concerning this report, please feel free to contact me

Sincerely,

Sherri Guess

sherri.guess@pacelabs.com Project Manager

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust

Page 1 of 13





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 6093598

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665





#### SAMPLE SUMMARY

Project: MONTHLY NPDES 6093598

Pace Project No.:

Lab ID 6093598001	Sample ID	<b>Matrix</b> Water	Date Collected 02/15/11 10:45	<b>Date Received</b> 02/15/11 23:05
6093598001	SL001	Water	02/15/11 10:45	
6093598002	WT003	Water	02/15/11 10:30	





## SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES 6093598

Pace Project No.:

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
6093598001	SL001	SM 2540D	JPF	1	PASI-K
		SM 4500-H+B	SRM1	_	PASI-K
		EPA 300.0	JML	_	PASI-K
		EPA 300.0	JML	2	PASI-K
		EPA 350.1	CMG	_	PASI-K
		EPA 365.4	CMG	_	PASI-K
6093598002	WT003	SM 2540D	JPF	_	PASI-K
		SM 4500-H+B	SRM1	_	PASI-K
		EPA 300.0	JML	_	PASI-K
		EPA 300.0	JML	2	PASI-K
		EPA 350.1	CMG	_	PASI-K
		EPA 365.4	CMG	_	DAGLK

Page 4 of 13



#### **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 6093598

Sample: SL001	Lab ID: 6093598001	Collected: 02/15/11 10:45	5 Received: 02/15/11 23:05	Matrix: Water	
Parameters	Results Units	s Report Limit DF	Prepared Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	2540D			
Total Suspended Solids	<b>11.0</b> mg/L	5.0 1	02/17/11 14:40	10	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	4500-H+B			
pH at 25 Degrees C	7.3 Std. Units	0.10 1	02/16/11 14:40	10	H6
300.0 IC Anions	Analytical Method: EPA 300.0	300.0			
Nitrate as N	<b>0.99</b> mg/L	0.10 1	02/16/11 22:05	)5 14797-55-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	300.0			
Fluoride Sulfate	<b>0.43</b> mg/L <b>76.4</b> mg/L	0.20 1 20.0 20	02/26/11 16:46 02/26/11 17:28	16 16984-48-8 28 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	\350.1			
Nitrogen, Ammonia	ND mg/L	0.10 1	02/23/11 17:22	22 7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	\365.4			
Phosphorus	<b>0.58</b> mg/L	0.10 1	02/17/11 15:48	48 7723-14-0	
Sample: WT003	Lab ID: 6093598002	Collected: 02/15/11 10:30	Received: 02/15/11 23:05	Matrix: Water	
Parameters	Results Units	s Report Limit DF	Prepared Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	2540D			
Total Suspended Solids	ND mg/L	5.0 1	02/17/11 14:40	<b>‡</b> 0	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	4500-H+B			
pH at 25 Degrees C	6.3 Std. Units	0.10 1	02/16/11 14:40	10	H6
300.0 IC Anions	Analytical Method: EPA 300.0	\300.0			
Nitrate as N	<b>1.1</b> mg/L	0.10 1	02/16/11 21:20	20 14797-55-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	\300.0			
Fluoride Sulfate	<b>0.59</b> mg/L <b>255</b> mg/L	0.20 1 50.0 50	02/26/11 17:42 02/26/11 17:57	12 16984-48-8 57 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	\350.1			
Nitrogen, Ammonia	<b>0.47</b> mg/L	0.10 1	02/23/11 18:19	19 7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	\365.4			
Phosphorus	ND mg/L	0.10 1	02/17/11 15:50	50 7723-14-0	

Date: 03/01/2011 12:25 PM

REPORT OF LABORATORY ANALYSIS





## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6093598

QC Batch Method: QC Batch: SM 2540D WET/27712 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 6093598001

METHOD BLANK: 772179 Matrix: Water

Associated Lab Samples: Total Suspended Solids Parameter 6093598001 mg/L Units Blank Result R Reporting Limit 5.0 02/17/11 14:36 Analyzed Qualifiers

SAMPLE DUPLICATE: 772180

Total Suspended Solids Parameter mg/L Units 6093689001 Result 170 Result Dup 175 RPD ω Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 772183

Total Suspended Solids Parameter mg/L Units 6093592001 Result 41.0 Result Dup 38.0 RPD ω Max RPD 25 Qualifiers

Date: 03/01/2011 12:25 PM

REPORT OF LABORATORY ANALYSIS

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## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6093598

QC Batch Method: QC Batch: SM 2540D WET/27713 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 6093598002

METHOD BLANK: 772196

Associated Lab Samples: Parameter 6093598002 Units Blank Result Matrix: Water Reporting Limit Analyzed

SAMPLE DUPLICATE: 772197

Total Suspended Solids

mg/L

R

5.0

02/17/11 14:40

Qualifiers

Total Suspended Solids Parameter mg/L Units 6093598002 Result R Result Dup  $\frac{1}{2}$ RPD Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 772198

Total Suspended Solids Parameter mg/L Units 6093626001 Result 67.0 Result Dup 68.0 RPD RPDMax 25 Qualifiers

Date: 03/01/2011 12:25 PM

neac.



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6093598

QC Batch Method: QC Batch: SM 4500-H+B WET/27690 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 6093598001, 6093598002

SAMPLE DUPLICATE: 771483

pH at 25 Degrees C Parameter Std. Units Units 6093595002 Result 7.6 Result Dup 7.6 RPD Max RPD 5 H6 Qualifiers

Date: 03/01/2011 12:25 PM

REPORT OF LABORATORY ANALYSIS

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## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6093598

QC Batch Method: QC Batch: EPA 300.0 WETA/15457 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6093598001, 6093598002

METHOD BLANK: 771534 Matrix: Water

Associated Lab Samples: 6093598001, 6093598002

Nitrate as N Parameter mg/L Units Result Blank R Reporting Limit 0.10 02/16/11 17:47 Analyzed Qualifiers

Nitrate as N LABORATORY CONTROL SAMPLE: 771535 Parameter mg/L Units Conc. Spike S Result LCS 4.5 % Rec LCS 9 % Rec Limits 90-110 Qualifiers

Nitrate as N MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 6093624001 Result 771536 6.4 Spike Conc. NS. 6 Spike Conc. MSD 10 771537 Result S 15.5 Result MSD 15.8 % Rec S 9 MSD % Rec 94 % Rec Limits 68-120 RPD RPD 2 Max 16 Qual

Nitrate as N MATRIX SPIKE SAMPLE: Parameter mg/L 771538 Units 6093556002 Result 9.1 Conc. Spike 5 Result S 14.5 % Rec S 107 % Rec Limits 68-120 Qualifiers

Date: 03/01/2011 12:25 PM

neac.



Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6093598

QC Batch Method: QC Batch: EPA 300.0 WETA/15534 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 6093598001, 6093598002

METHOD BLANK: 776283

Matrix: Water

Fluoride Sulfate Associated Lab Samples: Parameter 6093598001, 6093598002 mg/L mg/L Units Result Blank  $\frac{1}{6}$ Reporting Limit 0.20 1.0 02/26/11 14:52 02/26/11 14:52 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L mg/L 776284 Units Conc. Spike 50 50 Result LCS 4.8 5.0 % Rec LCS 97 100 % Rec Limits 90-110 90-110 Qualifiers

Sulfate Fluoride MATRIX SPIKE SAMPLE: Parameter mg/L mg/L 776287 Units 6093622001 Result 3.1 2.7 Spike Conc. 5 5 Result S 7.8 7.5 % Rec S 95 97 % Rec Limits 75-110 61-119 Qualifiers

Fluoride Sulfate MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L mg/L Units 6093696001 Result 776288 0.29 12.3 Spike Conc. S 50 50 Spike Conc. MSD 50 50 776289 Result SN 5.0 17.3 Result MSD 5.0 17.4 % Rec  $S_{N}$ 94 99 % Rec MSD 101 95 % Rec Limits 75-110 61-119 RPD RPD Max 100 Qual

Date: 03/01/2011 12:25 PM

REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6093598

QC Batch Method: QC Batch: EPA 350.1 WETA/15490 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 6093598001, 6093598002

Associated Lab Samples: METHOD BLANK: 774289 6093598001, 6093598002 Matrix: Water

Nitrogen, Ammonia Parameter mg/L Units Result Blank R Reporting Limit 0.10 02/23/11 16:52 Analyzed Qualifiers

Nitrogen, Ammonia LABORATORY CONTROL SAMPLE: 774290 Parameter mg/L Units Conc. Spike N Result LCS 2.0 % Rec LCS 101 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 774291 Units 6093333002 Result 5.6 Spike Conc. 20 Result SM 34.4 % Rec SM 144 % Rec Limits 90-110 M0 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 774293 Units 6093538001 Result ND Spike Conc. N Result  $S_{N}$ 1.2 % Rec SN 9 % Rec Limits 90-110 M0 Qualifiers

Date: 03/01/2011 12:25 PM

REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 6093598

QC Batch Method: QC Batch: EPA 365.4 WETA/15463 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 6093598001, 6093598002

METHOD BLANK: 771779

**Phosphorus** Associated Lab Samples: Parameter 6093598001, 6093598002 mg/L Units Result Blank Matrix: Water R Reporting Limit 0.10 02/17/11 15:22 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 771780

Phosphorus Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 104 % Rec Limits 90-110 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 771781 Units 6093400003 Result 2.2 Spike Conc. N Result SM 4.0 % Rec SM 88 % Rec Limits 72-121 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 771783 Units 6093601001 Result <u>.</u>3 Spike Conc. N Result  $S_{N}$ 3.2 % Rec SN 100 % Rec Limits 72-121 Qualifiers

SAMPLE DUPLICATE: 771782

Phosphorus Parameter mg/L Units 6093401002 Result 15.2 Result Dup 14.4 RPD 6 Max RPD 15 Qualifiers

Date: 03/01/2011 12:25 PM

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 6093598

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable. SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. each analyte is a combined concentration. The result reported for

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

Pace Analytical Services - Kansas City

#### **ANALYTE QUALIFIERS**

Н Analysis initiated more than 15 minutes after sample collection.

Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

nelac





May 20, 2005

Mr. KAMYAR MANESH FI MISSOURI REMEDIATION TRUST 103 W. 26TH

KANSAS CITY, MO 64116

RE: Lab Project Number: 6094592

Client Project ID: NPDES SAMPLING 5/2/05

Dear Mr. MANESH:

Enclosed are the analytical results for sample(s) received by the laboratory on May 4, 2005. Results reported herein conform to the most current NEIAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,

Comie X Danbur

Connie Gardner connie.gardner@pacelabs.com Project Manager

Kansas/NELAP Certification Number E-10116

Enclosures



#### SAMPLE SUMMARY

Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

609	609	Sam	FEC
5094592-002	094592-001	Sample Number	FroJecc
608125019 WT003	608125001	mber Number	эшірте
WT003	SL001		
		Client Sample ID	
		Ħ	
Water	Water	Matrix	
05/02,	05/02,	Date (	
05/02/05 08:25 05/04/05 06:10	05/02/05 08:15 05/04/05 06:10	Date Collected Date Received	
05/04/0	05/04/0	Date Re	
5 06:1	5 06:1	ceived	
6	0	Г	



## SAMPLE ANALYTE COUNT

Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

						6094592-002							6094592-001	Sample Number	Project
						608125019							608125001	Sample No	
						WT003							SL001	Client Sample ID	
3654T WEPA	3532 WEPA	3501 WEPA	3000 WPAC	3000 WNO3	1602 WEPA	1501 EPA	3654T WEPA	3532 WEPA	3501 WEPA	3000 WPAC	3000 WNO3	1602 WEPA	1501 EPA	Code	Analysis
Phosphorus, Total	Nitrogen, Nitrate plus Nitrite	Ammonia	Anions, Ion Chromatography	Anions IC 48hr Water	Total Suspended Solids	рH	Phosphorus, Total	Nitrogen, Nitrate plus Nitrite	Ammonia	Anions, Ion Chromatography	Anions IC 48hr Water	Total Suspended Solids	ЪН	Analysis Description	
														Reported	Analytes





Anions, Ion Chromatography Fluoride Sulfate	Anions IC 48hr Water Nitrate as N	Total Suspended Solids Total Suspended Solids	ън рн wec ciremitscry	Parameters	Lab Sample No: 608125001 Client Sample ID: SL001
Method: EPA 300.0 1.21 mg/l 147. mg/l	Method: EPA 300.0 1.13 mg/l	Method: EPA 160.2 ND mg/l	Method: EPA 150.1 7.97	Results Uni	
0.200	1.00	5.00		Units Report Limit	Project Sample I
05/19/05 18:12 PDA 05/19/05 18:12 PDA	05/04/05 11:47 PDA	05/09/05 MR1	05/04/05 MR1	Analyzed By	Project Sample Number: 6094592-001 Matrix: Water
16984-48-8 14808-79-8	2		н	CAS No. Qual RegImt	Date Collected: 05/02/05 08:15 Date Received: 05/04/05 06:10

Nitrogen, Nitrate plus Nitrite Nitrogen, NO2 plus NO3

Method: EPA 353.2 1.65 mg/

mg/l

0.500

05/16/05

KNS

Method: EPA 350.1 3.32 mg/

mg/l

0.200

05/06/05

KNS 7727-37-9

Method: EPA 365.4

1.43

mg/l

0.500

05/10/05

ACM 7723-14-0

Ammonia

Nitrogen, Ammonia

Phosphorus, Total

Phosphorus

Date: 05/20/05 Page: 1 of 11





	Client Sample ID: WT003	Lab Sample No: 608125019
	WT003	608125019
1		
:		
ı		Proje
		ct Sa
:		mple
ı	Matrix: Water	Project Sample Number: 6094592-002
	Water	609459
l		2-002
	Date	Date C
)	e Received: 05/04/05 06:10	Collected: 05/02/05 08:25
! !	05/04/05	05/02/05
	06:10	08:25

Phosphorus, Total Phosphorus	Nitrogen, Nitrate plus Nitrite Nitrogen, NO2 plus NO3	Ammonia Nitrogen, Ammonia	Anions, Ion Chromatography Fluoride Sulfate	Anions IC 48hr Water Nitrate as N	Total Suspended Solids Total Suspended Solids	Hq	Parameters Wet Chemistry
Method: EPA 365.4 0.536 mg	Method: EPA 3.55	Method: EPA 350.1 19.7 mg	Method: EPA 300.0 2.96 mg 675. mg	Method: EPA 300.0 2.80 mg	Method: EPA 160.2 ND mg	Method: EPA 150.1 7.27	Results
365.4 mg/l	353.2 mg/l	350.1 mg/l	300.0 mg/l mg/l	300.0 mg/l	160.2 mg/l	150.1	Units
0.500	1.00	2.00	0.200 20.0	1.00	5.00		Report Limit
05/10/05	05/16/05	05/06/05	05/19/05 19:02 PDA 05/19/05 19:02 PDA	05/04/05 11:59 PDA	05/09/05	05/04/05	Analyzed
ACM	KNS	KNS	19:02 PDA 19:02 PDA	9 PDA	MR1	MR1	Ву
7723-14-0		7727-37-9	16984-48-8 14808-79-8				CAS No.
				N		н	Qual RegLmt

Date: 05/20/05 Page: 2 of 11





## PARAMETER FOOTNOTES

ð
Not
 detected
at or
r above
adjusted
reporting
limit

Not Calculable

д X Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

Ð Adjusted Method Detection Limit

pH analysis initiated more than 15 minutes from sample collection. Analysis conducted in excess of EPA recommended holding time.

[1] [2]

Date: 05/20/05

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Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

QC Batch: 193438 QC Batch Method: EPA 150.1 Associated Lab Samples: Analysis Method: EPA 150.1 Analysis Description: pH 608125019

608125001

SAMPLE DUPLICATE: 608128013

Parameter pH Units Result 7.970 608125001 Result 7.960 ΦŪ₽ 0 RPD Max <u>RPD</u> 10 Footnotes
1

Date: 05/20/05 Page: 4 of 11





Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

QC Batch: 193772 QC Batch Method: EPA 160.2 Analysis Method: EPA 160.2 Analysis Description: Total Suspended Solids

Associated Lab Samples: 608125001 608125019

METHOD BLANK: 608142709

Associated Lab Samples: 608125001 608125019

Parameter Result Blank Reporting Footnotes

Total Suspended Solids Units mg/l ¥ Limit 5.00

SAMPLE DUPLICATE: 608142717

Parameter
Total Suspended Solids Units 608126066 Result ¥ Result **And** ¥ NC RPD Max RPD 18 Footnotes

Date: 05/20/05 Page: 5 of 11





Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

Associated Lab Samples: QC Batch Method: EPA 300.0 QC Batch: 193396 608125001 608125019 Analysis Description: Anions IC 48hr Water Analysis Method: EPA 300.0

Associated Lab Samples: METHOD BLANK: 608125563 608125001 608125019

Parameter Nitrate as N Units mg/l Result Blank ¥ Limit Reporting 1.00 Footnotes

LABORATORY CONTROL SAMPLE: 608125571

Parameter Nitrate as N mg/l Units Conc. Spike 25.00 Result 25.85 CCS % Rec SOT 103 Limits 90-110 % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608125589 608125597

Parameter Nitrate as z mg/l Units 608122420 Result 19.94 Conc. 25.00 Spike Result 50.72 SM Result 47.32 MSD % Rec 123 SK % Rec 110 MSD <u>Limits RPD</u> 90-110 7 % Rec RPD Max N Footnotes

SAMPLE DUPLICATE: 608125605

Parameter Nitrate as N mg/l Units 608123022 Result 1.570 Result ΔUÞ 1.450 <u>RPD</u> 8 RPD Max 10 Footnotes

Date: 05/20/05

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Lab Project Number: 6094592
Client Project ID: NPDES SAMPLING 5/2/05

QC Batch Method: EPA 353.2 QC Batch: 193598 Analysis Method: EPA 353.2 Analysis Description: Nitrogen, Nitrate plus Nitrite

Associated Lab Samples: 608125001 608125019

METHOD BLANK: 608134284

Associated Lab Samples: 608125001 608125019

Parameter
Nitrogen, NO2 plus NO3 Units mg/l Result Blank ¥ Limit Reporting 0.500 Footnotes

LABORATORY CONTROL SAMPLE: 608134292

Parameter
Nitrogen, NO2 plus NO3 mg/l Units Conc. Spike 2.000 Result CCS 2.200 % Rec SOT 110 90-110 Limits % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608134300 608134318

Parameter Nitrogen, 1 NO2 plus NO3 mg/l Units 608128658 Result 17.62 Conc. 10.00 Spike Result 26.75 ΝS Result 26.92 MSD % <u>Rec</u> 91 SM % <u>Rec</u> 93 **USM** Limits 90-110 % Rec 1 RPD RPD Max Footnotes

SAMPLE DUPLICATE: 608134326

Parameter
Nitrogen, NO2 plus NO3 mg/l Units 608099776 Result 0.2430 Result ΔUÞ 0.3080 <u>RPD</u> <u>RPD</u> 20 Max Footnotes

Date: 05/20/05

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Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

Associated Lab Samples: QC Batch Method: EPA 350.1 QC Batch: 193646 608125001 608125019 Analysis Description: Ammonia Analysis Method: EPA 350.1

METHOD BLANK: 608136933

Associated Lab Samples: 608125001 608125019

Parameter
Nitrogen, Ammonia Units mg/l Result Blank ¥ Limit Reporting 0.200 Footnotes

LABORATORY CONTROL SAMPLE: 608136941

Parameter
Nitrogen, Ammonia mg/l Units Conc. Spike 3.000 Result CCS 3.225 % Rec SOT 108 90-110 Limits % Rec Footnotes

MATRIX SPIKE: 608136966

Parameter Nitrogen, Ammonia mg/l Units 608128955 Result 41.56 Conc. 20.00 Spike Result 62.25 ΝS % Rec 103 SM % Rec <u>Limits Footnotes</u> 90-110

SAMPLE DUPLICATE: 608136958

Parameter
Nitrogen, Ammonia Units mg/l 608128955 Result 41.60 Result ΔUÞ 41.30 1 RPD <u>RPD</u> 20 Max Footnotes

Date: 05/20/05

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Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

Associated Lab Samples: QC Batch Method: EPA 365.4 QC Batch: 193840 608125001 608125019 Analysis Description: Phosphorus, Total Analysis Method: EPA 365.4

METHOD BLANK: 608144754

Associated Lab Samples: 608125001 608125019

Phosphorus Parameter Units mg/l Result Blank ¥ Limit Reporting 0.500 Footnotes

LABORATORY CONTROL SAMPLE: 608144762

Phosphorus Parameter mg/l Units Conc. Spike 2.000 Result CCS 1.926 % Rec SOT 96 Limits 86-117 % Rec Footnotes

MATRIX SPIKE: 608144770

Parameter Phosphorus mg/l Units 608133518 Result 1.001 Conc. 2.000 Spike Result 3.083 ΝS % Rec 104 SM Limits Footnotes
61-134 % Rec

SAMPLE DUPLICATE: 608144788

Phosphorus Parameter Units mg/l 608133559 Result 1.900 Result ΔUÞ 1.870 2 RPD Max <u>RPD</u> 17 Footnotes

Date: 05/20/05

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Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

Associated Lab Samples: QC Batch Method: EPA 300.0 QC Batch: 194625 608125001 608125019 Analysis Description: Anions, Ion Chromatography Analysis Method: EPA 300.0

METHOD BLANK: 608175832

Associated Lab Samples: 608125001 608125019

Sulfate <u>Parameter</u> Fluoride mg/l mg/1Units Blank Result ¥ ¥ Limit Reporting 1.00 0.200 Footnotes

LABORATORY CONTROL SAMPLE: 608175840

Sulfate Fluoride Parameter mg/l mg/l Units Conc. 150.00 Spike 20.00 Result 145.9 19.18 CCS % Rec  $S_{T}$ 96 97 <u>Limits</u> 90-110 90-110 % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608175857 608175865

<u>Parameter</u> Fluoride Sulfate mg/l Units mg/1Result 2.768 608137659 607.7 50.00 50.00 Spike 617.6 Result 56.21 600.8 Result 54.47 MSD 107 SM 20 Rec MSD 103 0 Limits 90-110 90-110 % Rec RPD RPD Footnotes ω

SAMPLE DUPLICATE: 608175873

Sulfate Fluoride Parameter mg/l mg/1Units 608137675 Result 565.0 4.070 571.0 Result đữ 4.260 RPD RPD Max 10 Footnotes

Date: 05/20/05

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Lab Project Number: 6094592

Client Project ID: NPDES SAMPLING 5/2/05

# QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

- LCS(D) Laboratory Control Sample (Duplicate)
- MS(D) Matrix Spike (Duplicate)
- ĀŪĀ Sample Duplicate
- N N Not detected at or above adjusted reporting limit
- Not Calculable
- Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- Ĕ Adjusted Method Detection Limit
- RPD Relative Percent Difference
- pH analysis initiated more than 15 minutes from sample collection.
- [2] The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS
- $\mathbb{Z}$ and/or LCSD were within acceptance limits showing that the analytical system was in control. The sample matrix affected the Matrix Spike and Matrix Spike Duplicate (MS/MSD) compound recovery. successful recovery of the Laboratory Control Sample (LCS) demonstrates the analytical system was for this QA/QC sample group. recovery of the Laboratory Control Sample (ICS) demonstrates the analytical system was in control

Date: 05/20/05 Page: 11 of 11





May 20, 2005

PCS PHOSPHATE COMPANY, INC. Mr. DOUG ENGEL

PO BOX 225
301 STATE LINE AVE.
JOPLIN, MO 64802

Lab Project Number: 6094592

Client Project ID: NPDES SAMPLING 5/2/05

Dear Mr. ENGEL:

Enclosed are the analytical results for sample(s) received by the laboratory on May 4, 2005. Results reported herein conform to the most current NEIAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,

comnie.gardner@pacelabs.com Project Manager Connie Gardner

Kansas/NELAP Certification Number E-10116

Enclosures



#### SAMPLE SUMMARY

Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

609	609	Sam	FEC
5094592-002	094592-001	Sample Number	FroJecc
608125019 WT003	608125001	mber Number	эшірте
WT003	SL001		
		Client Sample ID	
		Ħ	
Water	Water	Matrix	
05/02,	05/02,	Date (	
05/02/05 08:25 05/04/05 06:10	05/02/05 08:15 05/04/05 06:10	Date Collected Date Received	
05/04/0	05/04/0	Date Re	
5 06:1	5 06:1	ceived	
6	0	Г	



## SAMPLE ANALYTE COUNT

Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

						6094592-002							6094592-001	Sample Number	Project
						608125019							608125001	Sample No	
						WT003							SL001	Client Sample ID	
3654T WEPA	3532 WEPA	3501 WEPA	3000 WPAC	3000 WNO3	1602 WEPA	1501 EPA	3654T WEPA	3532 WEPA	3501 WEPA	3000 WPAC	3000 WNO3	1602 WEPA	1501 EPA	Code	Analysis
Phosphorus, Total	Nitrogen, Nitrate plus Nitrite	Ammonia	Anions, Ion Chromatography	Anions IC 48hr Water	Total Suspended Solids	рH	Phosphorus, Total	Nitrogen, Nitrate plus Nitrite	Ammonia	Anions, Ion Chromatography	Anions IC 48hr Water	Total Suspended Solids	ЪН	Analysis Description	
														Reported	Analytes





Anions, Ion Chromatography Fluoride Sulfate	Anions IC 48hr Water Nitrate as N	Total Suspended Solids Total Suspended Solids	ън рн wec ciremitscry	Parameters	Lab Sample No: 608125001 Client Sample ID: SL001
Method: EPA 300.0 1.21 mg/l 147. mg/l	Method: EPA 300.0 1.13 mg/l	Method: EPA 160.2 ND mg/l	Method: EPA 150.1 7.97	Results Uni	
0.200	1.00	5.00		Units Report Limit	Project Sample I
05/19/05 18:12 PDA 05/19/05 18:12 PDA	05/04/05 11:47 PDA	05/09/05 MR1	05/04/05 MR1	Analyzed By	Project Sample Number: 6094592-001 Matrix: Water
16984-48-8 14808-79-8	2		н	CAS No. Qual RegImt	Date Collected: 05/02/05 08:15 Date Received: 05/04/05 06:10

Nitrogen, Nitrate plus Nitrite Nitrogen, NO2 plus NO3

Method: EPA 353.2 1.65 mg/

mg/l

0.500

05/16/05

KNS

Method: EPA 350.1 3.32 mg/

mg/l

0.200

05/06/05

KNS 7727-37-9

Method: EPA 365.4

1.43

mg/l

0.500

05/10/05

ACM 7723-14-0

Ammonia

Nitrogen, Ammonia

Phosphorus, Total

Phosphorus

Date: 05/20/05 Page: 1 of 11





	Client Sample ID: WT003	Lab Sample No: 608125019
	WT003	608125019
1		
:		
ı		Proje
		ct Sa
:		mple
ı	Matrix: Water	Project Sample Number: 6094592-002
	Water	609459
l		2-002
	Date	Date C
)	e Received: 05/04/05 06:10	Collected: 05/02/05 08:25
! !	05/04/05	05/02/05
	06:10	08:25

Phosphorus, Total Phosphorus	Nitrogen, Nitrate plus Nitrite Nitrogen, NO2 plus NO3	Ammonia Nitrogen, Ammonia	Anions, Ion Chromatography Fluoride Sulfate	Anions IC 48hr Water Nitrate as N	Total Suspended Solids Total Suspended Solids	Hq	Parameters Wet Chemistry
Method: EPA 365.4 0.536 mg	Method: EPA 3.55	Method: EPA 350.1 19.7 mg	Method: EPA 300.0 2.96 mg 675. mg	Method: EPA 300.0 2.80 mg	Method: EPA 160.2 ND mg	Method: EPA 150.1 7.27	Results
365.4 mg/l	353.2 mg/l	350.1 mg/l	300.0 mg/l mg/l	300.0 mg/l	160.2 mg/l	150.1	Units
0.500	1.00	2.00	0.200 20.0	1.00	5.00		Report Limit
05/10/05	05/16/05	05/06/05	05/19/05 19:02 PDA 05/19/05 19:02 PDA	05/04/05 11:59 PDA	05/09/05	05/04/05	Analyzed
ACM	KNS	KNS	19:02 PDA 19:02 PDA	9 PDA	MR1	MR1	Ву
7723-14-0		7727-37-9	16984-48-8 14808-79-8				CAS No.
				N		н	Qual RegLmt

Date: 05/20/05 Page: 2 of 11





## PARAMETER FOOTNOTES

Ą
Not
detected
at or
r above
adjusted
reporting
limit

- Not Calculable
- J N Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- Ð Adjusted Method Detection Limit
- [1] [2] pH analysis initiated more than 15 minutes from sample collection. Analysis conducted in excess of EPA recommended holding time.

Date: 05/20/05

Page: 3 of 11





Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

QC Batch: 193438 QC Batch Method: EPA 150.1 Associated Lab Samples: Analysis Method: EPA 150.1 Analysis Description: pH 608125019

608125001

SAMPLE DUPLICATE: 608128013

Parameter pH Units Result 7.970 608125001 Result 7.960 ΦŪ₽ 0 RPD Max <u>RPD</u> 10 Footnotes
1

Date: 05/20/05 Page: 4 of 11





Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

QC Batch: 193772 QC Batch Method: EPA 160.2 Analysis Method: EPA 160.2 Analysis Description: Total Suspended Solids

Associated Lab Samples: 608125001 608125019

Associated Lab Samples: METHOD BLANK: 608142709 608125001 608125019

Blank Reporting

Total Suspended Solids Parameter Units mg/l Result ¥ Limit 5.00 Footnotes

SAMPLE DUPLICATE: 608142717

Parameter
Total Suspended Solids Units 608126066 Result ¥ Result **And** ¥ NC RPD Max RPD 18 Footnotes

Date: 05/20/05 Page: 5 of 11





Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

Associated Lab Samples: QC Batch Method: EPA 300.0 QC Batch: 193396 608125001 608125019 Analysis Description: Anions IC 48hr Water Analysis Method: EPA 300.0

Associated Lab Samples: METHOD BLANK: 608125563 608125001 608125019

Parameter Nitrate as N Units mg/l Result Blank ¥ Limit Reporting 1.00 Footnotes

LABORATORY CONTROL SAMPLE: 608125571

Parameter Nitrate as N mg/l Units Conc. Spike 25.00 Result 25.85 CCS % Rec SOT 103 Limits 90-110 % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608125589 608125597

Parameter Nitrate as z mg/l Units 608122420 Result 19.94 Conc. 25.00 Spike Result 50.72 SM Result 47.32 MSD % Rec 123 SK % Rec 110 MSD <u>Limits RPD</u> 90-110 7 % Rec RPD Max N Footnotes

SAMPLE DUPLICATE: 608125605

Parameter Nitrate as N mg/l Units 608123022 Result 1.570 Result ΔUÞ 1.450 <u>RPD</u> 8 RPD Max 10 Footnotes

Date: 05/20/05

Page: 6 of 11





Lab Project Number: 6094592
Client Project ID: NPDES SAMPLING 5/2/05

QC Batch Method: EPA 353.2 QC Batch: 193598 Analysis Method: EPA 353.2 Analysis Description: Nitrogen, Nitrate plus Nitrite

Associated Lab Samples: 608125001 608125019

METHOD BLANK: 608134284

Associated Lab Samples: 608125001 608125019

Parameter
Nitrogen, NO2 plus NO3 Units mg/l Result Blank ¥ Limit Reporting 0.500 Footnotes

LABORATORY CONTROL SAMPLE: 608134292

Parameter
Nitrogen, NO2 plus NO3 mg/l Units Conc. Spike 2.000 Result CCS 2.200 % Rec SOT 110 90-110 Limits % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608134300 608134318

Parameter Nitrogen, 1 NO2 plus NO3 mg/l Units 608128658 Result 17.62 Conc. 10.00 Spike Result 26.75 ΝS Result 26.92 MSD % <u>Rec</u> 91 SM % <u>Rec</u> 93 **USM** Limits 90-110 % Rec 1 RPD RPD Max Footnotes

SAMPLE DUPLICATE: 608134326

Parameter
Nitrogen, NO2 plus NO3 mg/l Units 608099776 Result 0.2430 Result ΔUÞ 0.3080 <u>RPD</u> <u>RPD</u> 20 Max Footnotes

Date: 05/20/05

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Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

Associated Lab Samples: QC Batch Method: EPA 350.1 QC Batch: 193646 608125001 608125019 Analysis Description: Ammonia Analysis Method: EPA 350.1

METHOD BLANK: 608136933

Associated Lab Samples: 608125001 608125019

Parameter
Nitrogen, Ammonia Units mg/l Result Blank ¥ Limit Reporting 0.200 Footnotes

LABORATORY CONTROL SAMPLE: 608136941

Parameter
Nitrogen, Ammonia mg/l Units Conc. Spike 3.000 Result CCS 3.225 % Rec SOT 108 90-110 Limits % Rec Footnotes

MATRIX SPIKE: 608136966

Parameter Nitrogen, Ammonia mg/l Units 608128955 Result 41.56 Conc. 20.00 Spike Result 62.25 ΝS % Rec 103 SM % Rec <u>Limits Footnotes</u> 90-110

SAMPLE DUPLICATE: 608136958

Parameter
Nitrogen, Ammonia Units mg/l 608128955 Result 41.60 Result ΔUÞ 41.30 1 RPD <u>RPD</u> 20 Max Footnotes

Date: 05/20/05

Page: 8 of 11



Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

Associated Lab Samples: QC Batch Method: EPA 365.4 QC Batch: 193840 608125001 608125019 Analysis Description: Phosphorus, Total Analysis Method: EPA 365.4

METHOD BLANK: 608144754

Associated Lab Samples: 608125001 608125019

Phosphorus Parameter Units mg/l Result Blank ¥ Limit Reporting 0.500 Footnotes

LABORATORY CONTROL SAMPLE: 608144762

Phosphorus Parameter mg/l Units Conc. Spike 2.000 Result CCS 1.926 % Rec SOT 96 Limits 86-117 % Rec Footnotes

MATRIX SPIKE: 608144770

Parameter Phosphorus mg/l Units 608133518 Result 1.001 Conc. 2.000 Spike Result 3.083 ΝS % Rec 104 SM Limits Footnotes
61-134 % Rec

SAMPLE DUPLICATE: 608144788

Phosphorus Parameter Units mg/l 608133559 Result 1.900 Result ΔUÞ 1.870 2 RPD Max <u>RPD</u> 17 Footnotes

Date: 05/20/05

Page: 9 of 11



Lab Project Number: 6094592 Client Project ID: NPDES SAMPLING 5/2/05

Associated Lab Samples: QC Batch Method: EPA 300.0 QC Batch: 194625 608125001 608125019 Analysis Description: Anions, Ion Chromatography Analysis Method: EPA 300.0

METHOD BLANK: 608175832

Associated Lab Samples: 608125001 608125019

Sulfate <u>Parameter</u> Fluoride mg/l mg/1Units Blank Result ¥ ¥ Limit Reporting 1.00 0.200 Footnotes

LABORATORY CONTROL SAMPLE: 608175840

Sulfate Fluoride Parameter mg/l mg/l Units Conc. 150.00 Spike 20.00 Result 145.9 19.18 CCS % Rec  $S_{T}$ 96 97 <u>Limits</u> 90-110 90-110 % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608175857 608175865

<u>Parameter</u> Fluoride Sulfate mg/l Units mg/1Result 2.768 608137659 607.7 50.00 50.00 Spike 617.6 Result 56.21 600.8 Result 54.47 MSD 107 SM 20 Rec MSD 103 0 Limits 90-110 90-110 % Rec RPD RPD Footnotes ω

SAMPLE DUPLICATE: 608175873

Sulfate Fluoride Parameter mg/l mg/1Units 608137675 Result 565.0 4.070 571.0 Result đữ 4.260 RPD RPD Max 10 Footnotes

Date: 05/20/05

Page: 10 of 11



Lab Project Number: 6094592

Client Project ID: NPDES SAMPLING 5/2/05

# QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

- LCS(D) Laboratory Control Sample (Duplicate)
- MS(D) Matrix Spike (Duplicate)
- ĀŪĀ Sample Duplicate
- N N Not detected at or above adjusted reporting limit
- Not Calculable
- Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- Ĕ Adjusted Method Detection Limit
- RPD Relative Percent Difference
- pH analysis initiated more than 15 minutes from sample collection.
- [2] The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS
- $\mathbb{Z}$ and/or LCSD were within acceptance limits showing that the analytical system was in control. The sample matrix affected the Matrix Spike and Matrix Spike Duplicate (MS/MSD) compound recovery. successful recovery of the Laboratory Control Sample (LCS) demonstrates the analytical system was for this QA/QC sample group. recovery of the Laboratory Control Sample (ICS) demonstrates the analytical system was in control

Date: 05/20/05 Page: 11 of 11

March 28, 2011

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES
Pace Project No.: 6095669

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on March 22, 2011 results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the The

If you have any questions concerning this report, please feel free to contact me

Sincerely,

Sherri Guess

**Enclosures** 

Project Manager

sherri.guess@pacelabs.com

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust



Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 6095669

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665



### SAMPLE SUMMARY

Project: MONTHLY NPDES

Pace Project No.: 6095669

6095669001	Lab ID	
SL001	Sample ID	
Water	Matrix	
03/20/11 09:30	Date Collected	
03/22/11 22:32	Date Received	

REPORT OF LABORATORY ANALYSIS

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# SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES 6095669

Pace Project No.:

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
6095669001	SL001	EPA 365.4	CMG	1	PASI-K



## **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 6095669

Sample: SL001 Parameters Results Lab ID: 6095669001 Units Collected: 03/20/11 09:30 Report Limit 무 Received: 03/22/11 22:32 Matrix: Water Prepared Analyzed CAS No. Qual

**365.4 Total Phosphorus** Analytical Method: EPA 365.4

**Phosphorus** 0.50 mg/L 0.10 03/26/11 12:53 7723-14-0

Date: 03/28/2011 10:48 AM



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 6095669

QC Batch Method: QC Batch: EPA 365.4 WETA/15779 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 6095669001

METHOD BLANK: 788992 Matrix: Water

Associated Lab Samples: 6095669001

**Phosphorus** Parameter mg/L Units Blank Result R Reporting Limit 0.10 03/26/11 12:50 Analyzed Qualifiers

Phosphorus LABORATORY CONTROL SAMPLE: 788993 Parameter mg/L Units Conc. Spike N Result LCS 2.0 % Rec LCS 98 % Rec Limits 90-110 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 788994 Units 6095669001 Result 0.50 Conc. Spike N Result SM 2.4 % Rec SM 94 % Rec Limits 72-121 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 788996 Units 6095317001 Result ND Spike Conc. N Result  $S_{N}$ 2.0 % Rec SN 99 % Rec Limits 72-121 Qualifiers

SAMPLE DUPLICATE: 788995

Phosphorus	Parameter	
mg/L	Units	
4.7	Result	
5.0	Result	,
6	RPD	
15	RPD	
	Qualifiers	

Date: 03/28/2011 10:48 AM

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 6095669

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. each analyte is a combined concentration. The result reported for

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

# **CHAIN-OF-CUSTODY / Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

	www.pacelabs.com		Section B		888164
Req	Client Information: Section A	Karyai Min	Page: of		4
Company	umled Industries	Copy To: Doug Engal			Quote Reference:
1000	103 W 26# Ava	Kanyar Maro	Requested Due Date:	*IAT:	Project Manager:
T	No. M. Kenney (ity , No	P.O.	*Turn around lime less than 14 days subject to laboratory and contractual obligations and may result in a		Project # 10 10 27 27 27
	6411	Project Name:	Rush Turnaround Surcharge.  Turn Around Time (TAT) in calendar days.	<u> </u>	11047
Phone	816-502-1444	Project Number:			Requested CO Analysis:
	Section D Required Client Information:	Valid Matrix Codes  MATRIX  DRINKING WATER DAY		Preservatives	
	SAMPLE ID	GROUNDWATER GW SURFACE WATER SW WASTE WATER WW	CODE ETYPE C=COM		100 5 / 10 Je
M #	One character per box.	ဥဖူး	RAS	ooll erve	% 0
ITE	Sample IDs MUST BE UNIQUE	의유동			T/E/ZONN
_	5 6001 1 2 3 0 4	\(\frac{2}{4}\)	67-13-05 630	*	A P P P S S C O O O O O O O O O O O O O O O O O
2	2 - 0 0 1	20 W	67-17-05 6230	*	ጽ >
ω	M 70 0 2 H 2 9 0 9		E7-13-05 6:45	×	XX
4	W 7003		C7-73-8 6:45	* * * * * * * * * * * * * * * * * * * *	<b>አ</b>
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10					
<b> </b> =					
12			£7.3.5.1		
	□ SC □ GA □ NPDES □	GROUND WATER DRINK	DRINKING WATER RELINQUISHED BY / AFF	FFILIATION DATE TIME A	ACCEPTED BY / AFFILIATION DATE TIME
	CONDITION SAMPLE NOTES		mad Hand	7	7/2/05
Ten	Temp in °C SAWITE NOTES	レダイ	2x Ja Marcat	+ 7/13/00 Koo K	7/14/05 6:10
Reg	Received on Ice YN	,			
Sea	Sealed Cooler YN				
San	Samples Intact (YXN)		Mari Nasi	ichael Henery	
מבור ב	ORIGINAL		June 10H	MALLER OF SAMPLER	DATE Signed: (MM/DD/YY) 7~/7~o S
Į					-





July 27, 2005

Mr. KAMYAR MANESH
FI MISSOURI REMEDIATION TRUST
103 W. 26TH
TANGAS CTTV MG 64116

KANSAS CITY, MO 64116

RE: Lab Project Number: 6097348

Client Project ID: NPDES SAMPLING 7/13/05

Dear Mr. MANESH:

Enclosed are the analytical results for sample(s) received by the laboratory on July 14, 2005. Results reporte herein conform to the most current NEIAC standards, where applicable, unless otherwise narrated in the body of the report. Results reported

If you have any questions concerning this report please feel free to contact me.

Sincerely,

Comie & Hardner

Connie Gardner connie.gardner@pacelabs.com Project Manager

Kansas/NELAP Certification Number E-10116

Enclosures



#### SAMPLE SUMMARY

Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05



## SAMPLE ANALYTE COUNT

Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05

	6097348-004	6097348-003			6097348-002	6097348-001	Sample Number	Project
	608355012	608355004			608354999	608354940	Sample No	
	WT0003	608355004 WT0003H2SO4			SL001	SL001H2SO4	Client Sample ID	
1602 3000 3000	3654T 1501	3501	3000	1602	3654T WEPA	3501	CC	Analysis
WEPA WNO3 WPAC		<b>5</b> !						
IPA IO3	WEPA EPA	WEPA	WNO3	WEPA	WEPA	3501 WEPA	Code	ysis
PA Total Suspended Solids 103 Anions IC 48hr Water AC Anions, Ion Chromatography	<pre>EPA Phosphorus, Total EPA pH</pre>		WNO3 Anions IC 48hr Water WPAC Anions, Ion Chromatography		WEPA Phosphorus, Total	WEPA Ammonia	de Analysis Description	ysis





Parameters	Client Sample ID: SL001H2SO4	Lab Sample No: 608354940
	SL001H2SO4	608354940
Results		
Units		₩
Report Limit		roject Sample
Results Units Report Limit Analyzed By CAS No.	Matrix: Water	Project Sample Number: 6097348-001
Ву		8-001
CAS No.	Date R	Date Co
_ Qual	eceive	llected
Qual_RegLmt	Received: 07/14/05 06:10	Collected: 07/13/05 06:30

Wet Chemistry Phosphorus, Total Phosphorus Ammonia Nitrogen, Ammonia Method: EPA 365.4 1.47 mg/ Method: EPA 350.1 9.21 mg/ mg/l mg/l 0.500 1.00 07/20/05 07/18/05 ACM 7723-14-0 KMW 7727-37-9

Date: 07/27/05 Page: 1 of 12





Client Sample ID: SL001	Lab Sample No: 608354999	
001	8354999	
Matrix: Water	Project Sample Number: 6097348-002	
Date Received: 07/14/05 06:10	Date Collected: 07/13/05 06:30	

Anions, Ion Chromatography Fluoride Sulfate	Anions IC 48hr Water Nitrate as N	Total Suspended Solids Total Suspended Solids	Hd Hd Mer criemirscry	Parameters
Method: EPA 300.0 2.04 mg 376. mg	Method: EPA 300.0 2.29 mg/l	Method: EPA 160.2 6.00 mg/l	Method: EPA 150.1 7.13	Results
300.0 mg/l mg/l	300.0 mg/l	160.2 mg/l	150.1	Units
0.200	1.00	5.00		Units Report Limit
07/26/05 23:45 PDA 16984-48: 07/26/05 23:07 PDA 14808-79:	07/15/05 03:50 PDA	07/15/05 A	07/14/05 17:00 AJM	
DA 16984-48-8 DA 14808-79-8	DA	АЛМ	M	Analyzed By CAS No.
			н	Qual RegLmt

Date: 07/27/05 Page: 2 of 12





Client Sample ID: WT0003H2SO4	Lab Sample No: 608355004
Matrix: Water	Project Sample Number: 6097348-003
Date Received: 07/14/05 06:10	Date Collected: 07/13/05 06:45

Phosphorus, Total Phosphorus	Ammonia Nitrogen, Ammonia	Parameters
Method: EPA 365.4 0.810 mg/l	Method: EPA 350.1 28.5 mg	Results
65.4 mg/l	350.1 mg/l	Units
0.500	2.00	Results Units Report Limit Analyzed By CAS No.
0.500 07/20/05	2.00 07/18/05	Analyzed
ACM	KMW	Ву
ACM 7723-14-0	KMW 7727-37-9	CAS No.
		Qual
		Qual RegLmt

Date: 07/27/05 Page: 3 of 12





	Client Sample ID: WT0003	Lab Sample No: 608355012	
	WT0003	608355012	
d ) ) ) )			
; ;			
		Project :	
1. } 1.	Ма	ample Nu	
Thits Doort Timit and The CAC No.	Matrix: Water	Project Sample Number: 6097348-004	
đ		8-004	
N N	Date I	Date Co	
2	Received:	ollected:	
	Received: 07/14/05 06:10	Collected: 07/13/05 06:45	

Results         Units         Report Limit         Analyzed         By         CAS No.         Qual By         CAS No.         Qual By           Method: EPA 150.1         7.02         07/14/05 17:00 AJM         1           Method: EPA 160.2         07/15/05 AJM         1           Method: EPA 300.0         07/15/05 04:15 PDA           Method: EPA 300.0         07/15/05 04:15 PDA           Method: EPA 300.0         07/27/05 00:10 PDA 16984-48-8           4.24 mg/l         0.200 07/27/05 00:10 PDA 14808-79-8	Anions, Ion Chromatography Fluoride Sulfate	Anions IC 48hr Water Nitrate as N	Total Suspended Solids Total Suspended Solids	Hd Hd	Parameters
Inits Report Limit Analyzed By CAS No.  07/14/05 17:00 AJM  /1 5.00 07/15/05 AJM  /1 1.00 07/15/05 04:15 PDA  /1 0.200 07/27/05 00:10 PDA 16984-48-8 /1 20.0 07/27/05 00:10 PDA 14808-79-8	Method: EPA 4.24 927.	Method: EPA 3.16	Method: EPA :	Method: EPA : 7.02	Results
Analyzed By CAS No.  07/14/05 17:00 AJM  07/15/05 AJM  07/15/05 04:15 PDA  07/27/05 00:10 PDA 16984-48-8  07/27/05 00:10 PDA 14808-79-8	300.0 mg/l mg/l	300.0 mg/l	160.2 mg/l	150.1	Units
Analyzed By CAS No.  07/14/05 17:00 AJM  07/15/05 AJM  07/15/05 04:15 PDA  07/27/05 00:10 PDA 16984-48-8  07/27/05 00:10 PDA 14808-79-8	0.200 20.0	1.00	5.00		Report Limit
ω ω .	07/27/05 00:10 1 07/27/05 00:10 1	07/15/05 04:15 1		07/14/05 17:00 i	Analyzed
	PDA 16984-48- PDA 14808-79-	PDA	MUA	MUA	By CAS No.
egImt	∞ ∞			н	Qual RegLmt

Date: 07/27/05 Page: 4 of 12



Face Analytical www.pacelabs.com

Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05

## PARAMETER FOOTNOTES

ð
Not
detected
at
유
above
adjusted
reporting
limit

Not Calculable

ч S Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

Ð Adjusted Method Detection Limit

Ξ pH analysis initiated more than 15 minutes from sample collection.

Page: 5 of 12

Date: 07/27/05





Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05

QC Batch: 198963 QC Batch Method: EPA 150.1 Associated Lab Samples: Analysis Method: EPA 150.1 Analysis Description: pH 608355012

608354999

SAMPLE DUPLICATE: 608356945

Parameter pH Units Result 7.550 608355624 Result 7.550 0 RPD Max <u>RPD</u> 10 Footnotes
1

Date: 07/27/05 Page: 6 of 12





Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05

QC Batch Method: EPA 160.2 QC Batch: 199010 Analysis Method: EPA 160.2 Analysis Description: Total Suspended Solids

Associated Lab Samples: 608354999 608355012

Associated Lab Samples: METHOD BLANK: 608360228 608354999 608355012

Parameter Result Blank Reporting Footnotes

Total Suspended Solids Units mg/l ¥ Limit 5.00

SAMPLE DUPLICATE: 608360236

Parameter
Total Suspended Solids Units Result 844.0 608357224 Result 808.0 ĀŪĀ RPD 4 <u>RPD</u> 18 Footnotes

Date: 07/27/05

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Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05

Associated Lab Samples: QC Batch Method: EPA 300.0 QC Batch: 198990 608354999 608355012 Analysis Description: Anions IC 48hr Water Analysis Method: EPA 300.0

METHOD BLANK: 608358479

Associated Lab Samples: 608354999 608355012

Parameter Nitrate as N Units mg/l Result Blank ¥ Limit Reporting 1.00 Footnotes

LABORATORY CONTROL SAMPLE: 608358487

Parameter Nitrate as N mg/l Units Conc. Spike 25.00 Result 23.42 CCS % Rec SOT 94 Limits 90-110 % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608358503 608358511

Parameter Nitrate as z mg/l Units 608357224 Result 0 Conc. Spike Result 6.153 SM Result MSD 6.156 % Rec 123 SK % Rec 123 MSD <u>Limits RPD</u> 90-110 0 % Rec 10 Max N Footnotes

SAMPLE DUPLICATE: 608358495

Parameter Nitrate as N mg/l Units 608354999 Result 2.290 Result ΔUÞ 2.300 1 RPD 10 Max Footnotes

Date: 07/27/05

Page: 8 of 12



Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05

Associated Lab Samples: QC Batch: 199152 QC Batch Method: EPA 350.1 608354940 608355004 Analysis Description: Ammonia Analysis Method: EPA 350.1

METHOD BLANK: 608369443

Associated Lab Samples: 608354940 608355004

Parameter
Nitrogen, Ammonia Units mg/l Result Blank ¥ Limit Reporting 0.200 Footnotes

LABORATORY CONTROL SAMPLE: 608369450

Parameter
Nitrogen, Ammonia mg/l Units Conc. Spike 2.000 Result CCS 2.181 % Rec SOT 109 90-110 Limits % Rec Footnotes

MATRIX SPIKE: 608369476

Parameter Nitrogen, Ammonia mg/l Units Result 608364188 0.4421 Conc. 2.000 Spike Result 2.521  $\mathbf{S}\mathbf{M}$ % Rec 104 SM % Rec Limits Footnotes
90-110

SAMPLE DUPLICATE: 608369468

Parameter
Nitrogen, Ammonia mg/l Units 608362091 Result ¥ Result AD A ¥ NC RPD RPD Max 20 Footnotes

Date: 07/27/05

Page: 9 of 12



Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05

Associated Lab Samples: QC Batch Method: EPA 365.4 QC Batch: 199226 608354940 608355004 Analysis Description: Phosphorus, Total Analysis Method: EPA 365.4

Associated Lab Samples: METHOD BLANK: 608371258 608354940 608355004

Phosphorus Parameter Units mg/l Result Blank ¥ Limit Reporting 0.500 Footnotes

LABORATORY CONTROL SAMPLE: 608371266

Phosphorus Parameter mg/l Units Conc. Spike 2.000 Result CCS 1.930 % Rec SOT 96 Limits 86-117 % Rec Footnotes

MATRIX SPIKE: 608371282

Parameter Phosphorus mg/l Units 608355632 Result 5.570 Conc. 2.000 Spike Result 7.210 ΝS % Rec 82 SM Limits Footnotes 61-134 % Rec

SAMPLE DUPLICATE: 608371274

Phosphorus Parameter mg/l Units 608361291 Result 2.450 Result ΔUÞ 2.410 2 RPD Max <u>RPD</u> 17 Footnotes

Date: 07/27/05

Page: 10 of 12



Lab Project Number: 6097348
Client Project ID: NPDES SAMPLING 7/13/05

QC Batch Method: EPA 300.0 QC Batch: 199765 Analysis Description: Anions, Ion Chromatography Analysis Method: EPA 300.0

Associated Lab Samples: 608354999 608355012

METHOD BLANK: 608391462

Associated Lab Samples: 608354999 608355012

Sulfate <u>Parameter</u> Fluoride mg/l mg/1Units Blank Result ¥ Limit Reporting 0.200 Footnotes

¥

1.00

LABORATORY CONTROL SAMPLE: 608391470

Sulfate Fluoride Parameter mg/l mg/l Units Conc. Spike 150.00 20.00 Result 146.7 18.10 CCS % Rec  $S_{T}$ 98 <u>Limits</u> 90-110 90-110 % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608391488 608391496

<u>Parameter</u> Fluoride Sulfate mg/l mg/1Units Result 0.2250 608318408 36.97 5.000 5.000 Spike Result 39.99 4.868 Result MSD 40.42 4.884 % Rec SM 93 61 <u>Rec</u> 93 MSD 69 <u>Limits</u> 90-110 90-110 % Rec RPD RPD 10 10 ω Footnotes

SAMPLE DUPLICATE: 608391504

Sulfate Fluoride Parameter mg/l mg/1Units 608318416 Result 75.00 0.2210 Result 73.90 ADG 0.2190 RPD ш RPD Max 10 Footnotes

Date: 07/27/05

Page: 11 of 12



Lab Project Number: 6097348

Client Project ID: NPDES SAMPLING 7/13/05

# QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

- LCS(D) Laboratory Control Sample (Duplicate)
- MS(D) Matrix Spike (Duplicate)
- ĀŪĀ Sample Duplicate
- N N Not detected at or above adjusted reporting limit
- Not Calculable
- Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- Ĕ Adjusted Method Detection Limit
- RPD Relative Percent Difference
- pH analysis initiated more than 15 minutes from sample collection.
- [2] The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS
- $\mathbb{Z}$ and/or LCSD were within acceptance limits showing that the analytical system was in control. The sample matrix affected the Matrix Spike and Matrix Spike Duplicate (MS/MSD) compound recovery. successful recovery of the Laboratory Control Sample (LCS) demonstrates the analytical system was for this QA/QC sample group. recovery of the Laboratory Control Sample (ICS) demonstrates the analytical system was in control

Date: 07/27/05 Page: 12 of 12





August 05, 2005

Mr. KAMYAR MANESH FI MISSOURI REMEDIATION TRUST 103 W. 26TH

KANSAS CITY, MO 64116

RE: Lab Project Number: 6098056

Client Project ID: NPDES SAMPLING 08/02/05

Dear Mr. MANESH:

Enclosed are the analytical results for sample(s) received by the laboratory on August 3, 2005. Results reported herein conform to the most current NEIAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,

Comme & Handmen

Connie Gardner connie.gardner@pacelabs.com Project Manager

Kansas/NELAP Certification Number E-10116

Enclosures



#### SAMPLE SUMMARY

Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

6098056-004 608416343 WT003 Water 08/02/05 06:15 08/03/05 06:05	6098056-003 608416335 WT003H2SO4 Water 08/02/05 06:15 08/03/05 06:05	6098056-002 608416327 SL001 Water 08/02/05 06:00 08/03/0	6098056-001 608416319 SL001H2SO4 Water 08/02/05 06:00 08/03/05 06:05	sample Number Number Cilent Sample in Matrix Date Collected Date Ke
08/03/	08/03/	08/03/0	08/03/0	Date Received



## SAMPLE ANALYTE COUNT

Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

	6098056-004	6098056-003				6098056-002		6098056-001	Sample Number	Project
	608416343	608416335				608416327		608416319	Sample No	
	WT003	WT003H2SO4				SL001		SL001H2SO4	Client Sample ID	
1602 3000 3000	3654T 1501	350	3000	3000	1602	1501	36.	35(	 	₽
	2 13	Н	ŏ	ŏ	Ñ	ĭ	543	ဋ	Q	ā
WEPA WNO3 WPAC	4T WEPA	3501 WEPA	0 WPAC	0 WNO3	2 WEPA	1 EPA	3654T WEPA	3501 WEPA	Code	Analysis
WEPA Total Suspended Solids WNO3 Anions IC 48hr Water WPAC Anions, Ion Chromatography		WEPA					54T WEPA Phosphorus, Total	01 WEPA Ammonia	Code Analysis Description	nalysis





Lab Sample No: Client Sample ID: 608416319 SL001H2SO4 Project Sample Number: 6098056-001
Matrix: Water Date Collected: 08/02/05 06:00
Date Received: 08/03/05 06:05

Wet Chemistry Parameters Phosphorus, Total Ammonia Nitrogen, Ammonia Phosphorus Method: EPA 365.4 0.595 mg/ Method: EPA 350.1 9.66 mg, Results mg/l mg/l Units Report Limit 0.500 0.400 08/04/05 08/04/05 Analyzed ACM ACM 7723-14-0 Ву 7727-37-9 CAS No. Qual RegLmt

Date: 08/05/05 Page: 1 of 12





Parameters	Client Sample ID: SL001	Lab Sample No: 608416327	
Regults			
Units			
Units Report Limit Analyzed By CAS No.		Project Sample Number: 6098056-002	
Analyzed	Matrix: Water	Number: 6098056-	
₽ V		-002	
CAS NO.	Date Re	Date Col	
Onal Regimt	Received: 08/03/05 06:05	Collected: 08/02/05 06:00	
	J	0	ĺ

Anions, Ion Chromatography Fluoride Sulfate	Anions IC 48hr Water Nitrate as N	Total Suspended Solids Total Suspended Solids	Hd bH Mer chemitscry	Parameters
Method: EPA 300.0 1.59 mg 396. mg	Method: EPA 300.0 2.50 mg/l	Method: EPA 160.2 5.00 mg/l	Method: EPA 150.1 7.34	Results
300.0 mg/l mg/l	300.0 mg/l	160.2 mg/l	150.1	Units
0.200 50.0	1.00	5.00		Units Report Limit
08/04/05 02:16 PDA 16984-48 08/04/05 02:16 PDA 14808-79	08/03/05 23:09 PDA	08/04/05	08/03/05 11:45 AJM	Analyzed
PDA 16984-48	PDA	АЛМ	ajm	Analyzed By CAS No.
9 8 8 8 8			ч	o. Qual RegLmt

Date: 08/05/05 Page: 2 of 12





Lab Sample No: Client Sample ID: 608416335 WT003H2SO4 Project Sample Number: 6098056-003
Matrix: Water Date Collected: 08/02/05 06:15
Date Received: 08/03/05 06:05

Wet Chemistry Parameters Phosphorus, Total Ammonia Nitrogen, Ammonia Phosphorus Method: EPA 365.4 Method: EPA 350.1 Results 31.2 0.304 J mg/l mg/l Units Report Limit 10.0 0.500 08/04/05 08/04/05 Analyzed ACM ACM 7723-14-0 Ву 7727-37-9 CAS No. Qual RegLmt

Date: 08/05/05 Page: 3 of 12





•	Client Sample ID: WT003	Lab Sample No: 608416343	
	Matrix: Water	Project Sample Number: 6098056-004	
	Date	Date	
	Received: 08/03/05 06:05	Collected: 08/02/05 06:15	

Anions, Ion Chromatography Fluoride Sulfate	Anions IC 48hr Water Nitrate as N	Total Suspended Solids Total Suspended Solids	Hd Hd	Parameters Wet Chemistry
Method: EPA 300.0 5.00 mg 1020 mg	Method: EPA 300.0 4.09 mg	Method: EPA 160.2 9.00 mg/l	Method: EPA 150.1 8.81	Results
300.0 mg/l mg/l	300.0 mg/l	160.2 mg/l	150.1	Units
0.200 50.0	1.00	5.00		Units Report Limit
08/04/05 02:29 PDA 16984-48: 08/04/05 02:29 PDA 14808-79:	08/03/05 23:46 PDA	08/04/05 AJM	08/03/05 11:45 AJM	Analyzed By
A 16984-48-8 A 14808-79-8	₽	M	M	CAS No.
			-	Qual RegLmt

Date: 08/05/05 Page: 4 of 12



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Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

## PARAMETER FOOTNOTES

ð
Not
detected
at
or above
e adjusted
reporting
limit

Not Calculable

J N Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

Ð Adjusted Method Detection Limit

Ξ pH analysis initiated more than 15 minutes from sample collection.

Date: 08/05/05 Page: 5 of 12





Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

QC Batch: 200446 QC Batch Method: EPA 150.1 Associated Lab Samples: Analysis Method: EPA 150.1 Analysis Description: pH 608416343

608416327

SAMPLE DUPLICATE: 608417770

Parameter pH Units Result 5.220 608416251 Result 5.200 ΦŪ₽ RPD 0 Max <u>RPD</u> 10 Footnotes
1

Date: 08/05/05

Page: 6 of 12





Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

Associated Lab Samples: QC Batch Method: EPA 160.2 QC Batch: 200448 608416327 608416343 Analysis Description: Total Suspended Solids Analysis Method: EPA 160.2

Associated Lab Samples: METHOD BLANK: 608417788 608416327 608416343

Total Suspended Solids Parameter Units mg/l Result Blank ¥ Limit 5.00 Reporting Footnotes

SAMPLE DUPLICATE: 608418927

Parameter
Total Suspended Solids Units Result 3680 608418521 Result 3710 **And** 1 RPD 18 Max Footnotes

Date: 08/05/05 Page: 7 of 12



Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

Associated Lab Samples: QC Batch Method: EPA 350.1 QC Batch: 200398 608416319 608416335 Analysis Description: Ammonia Analysis Method: EPA 350.1

METHOD BLANK: 608417358

Associated Lab Samples: 608416319 608416335

Parameter
Nitrogen, Ammonia Units mg/l Result Blank ¥ Limit Reporting 0.200 Footnotes

LABORATORY CONTROL SAMPLE: 608417366

Parameter
Nitrogen, Ammonia mg/l Units Conc. Spike 2.000 Result CCS 2.073 % Rec SOT 104 90-110 Limits % Rec Footnotes

MATRIX SPIKE: 608417374

Parameter Nitrogen, Ammonia mg/l Units 608416319 Result 9.665 Conc. 4.000 Spike Result 14.02 ΝS % <u>Rec</u> 109 SM <u>Limits Footnotes</u> 90-110 % Rec

SAMPLE DUPLICATE: 608417382

Parameter
Nitrogen, Ammonia Units mg/l 608416335 Result 31.20 Result ΔUÞ 31.70 1 RPD <u>RPD</u> 20 Max Footnotes

Date: 08/05/05

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Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

Associated Lab Samples: QC Batch Method: EPA 300.0 QC Batch: 200484 608416327 608416343 Analysis Description: Anions IC 48hr Water Analysis Method: EPA 300.0

Associated Lab Samples: METHOD BLANK: 608419339 608416327 608416343

Parameter Nitrate as N Units mg/l Result Blank ¥ Limit Reporting 1.00 Footnotes

LABORATORY CONTROL SAMPLE: 608419347

Parameter Nitrate as N mg/l Units Conc. Spike 25.00 Result 26.40 CCS % Rec SOT 106 Limits 90-110 % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608419354 608419362

Parameter Nitrate as z mg/l Units 608416327 Result 2.499 Conc. 5.000 Spike Result 8.778 SM Result MSD 8.631 % Rec 126 SK % Rec 123 MSD <u>Limits RPD</u> 90-110 2 % Rec RPD Max N Footnotes

SAMPLE DUPLICATE: 608419370

Parameter Nitrate as N mg/l Units 608416343 Result 4.090 Result ΔUÞ 4.060 1 RPD 10 Max Footnotes

Date: 08/05/05

Page: 9 of 12



Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

Associated Lab Samples: QC Batch Method: EPA 300.0 QC Batch: 200485 608416327 608416343 Analysis Description: Anions, Ion Chromatography Analysis Method: EPA 300.0

METHOD BLANK: 608419420

Associated Lab Samples: 608416327 608416343

Sulfate <u>Parameter</u> Fluoride mg/l mg/1Units Result Blank ¥ ¥ Limit Reporting 1.00 0.200 Footnotes

LABORATORY CONTROL SAMPLE: 608419438

Sulfate Fluoride Parameter mg/l mg/l Units 150.00 Conc. Spike 20.00 Result 149.8 19.16 CCS % Rec  $S_{T}$ 100 96 <u>Limits</u> 90-110 90-110 % Rec Footnotes

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608419446 608419453

<u>Parameter</u> Fluoride Sulfate mg/l mg/1Units Result 1.586 608416327 396.2 5.000 5.000 Spike Result 5.940 518.1 515.6 Result MSD 5.824 % Rec 2440 SM 87 % Rec 2388 MSD 85 <u>Limits</u> 90-110 90-110 % Rec RPD RPD Footnotes

SAMPLE DUPLICATE: 608419461

Sulfate Fluoride Parameter mg/l mg/1Units 608416343 1020 Result 5.000 Result 941.0 đữ 4.990 RPD **∞** О RPD Max 10 Footnotes

Date: 08/05/05

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Lab Project Number: 6098056
Client Project ID: NPDES SAMPLING 08/02/05

Associated Lab Samples: QC Batch Method: EPA 365.4 QC Batch: 200487 608416319 608416335 Analysis Description: Phosphorus, Total Analysis Method: EPA 365.4

METHOD BLANK: 608419677

Associated Lab Samples: 608416319 608416335

Phosphorus Parameter Units mg/l Result Blank ¥ Limit Reporting 0.500 Footnotes

LABORATORY CONTROL SAMPLE: 608419685

Phosphorus Parameter mg/l Units Conc. Spike 2.000 Result CCS 1.822 % Rec SOT 91 Limits 86-117 % Rec Footnotes

MATRIX SPIKE: 608419693

Parameter Phosphorus mg/l Units 608416319 Result 0.5950 Conc. 2.000 Spike Result ΝS 2.497 % <u>Rec</u> 95 SM Limits Footnotes 61-134 % Rec

SAMPLE DUPLICATE: 608419701

Phosphorus Parameter mg/l Units 608416335 Result 0.3040 Result ΔUÞ 0.3070 <u>RPD</u> Max <u>RPD</u> 17 Footnotes

Date: 08/05/05

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Lab Project Number: 6098056

Client Project ID: NPDES SAMPLING 08/02/05

# QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

- LCS(D) Laboratory Control Sample (Duplicate)
- MS(D) Matrix Spike (Duplicate)
- ĀŪĀ Sample Duplicate
- Not detected at or above adjusted reporting limit
- N N Not Calculable
- Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- Ĕ Adjusted Method Detection Limit
- RPD Relative Percent Difference
- [2] pH analysis initiated more than 15 minutes from sample collection.

  The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the analytical system was in control.

Date: 08/05/05 Page: 12 of 12



Pace Analytical Services, Inc.

Lenexa, KS 66219 9608 Loiret Blvd.

(913)599-5665

July 27, 2011

PO Box 225 301 State Line Road Joplin, MO 64802 Keith Brown PCS Phosphate Company Inc.

RE: Project: MONTHLY NPDES Pace Project No.: 60102514

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on July 13, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Showi Ju

sherri.guess@pacelabs.com Project Manager

Sherri Guess

**Enclosures** 

CC: Mr. Doug Engel, PCS Phosphate Company, Inc.

Mr. Kamyar Manesh, Fl Missouri Remediation Trust





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 60102514

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665



Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 (913)599-5665

### SAMPLE SUMMARY

Project: MONTHLY NPDES

Pace Project No.: 60102514

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60102514001	SL001	Water	07/12/11 06:30	07/13/11 22:32
60102514002	WT003	Water	07/12/11 06:15	07/13/11 22:32



Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 (913)599-5665

## SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES

Pace Project No.: 60102514

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60102514001	SL001	SM 2540D	LAJ	1	PASI-K
		SM 4500-H+B	SRM1	_	PASI-K
		EPA 300.0	JML	_	PASI-K
		EPA 300.0	JML	2	PASI-K
		EPA 350.1	AJM	_	PASI-K
		EPA 365.4	AJM	_	PASI-K
60102514002	WT003	SM 2540D	Ę	_	PASI-K
		SM 4500-H+B	SRM1	_	PASI-K
		EPA 300.0	JML	_	PASI-K
		EPA 300.0	JML	2	PASI-K
		EPA 350.1	AJM	_	PASI-K
		EPA 365.4	ALA	_	2

## ANALYTICAL RESULTS

Project: MONTHLY NPDES

Pace Project No.: 60102514

Sample: SL001	Lab ID: 60102514001	Collected: 07/12/11 06:30	0 Received: 07/13/11 22:32	22:32 Matrix: Water	
Parameters	Results Units	Report Limit DF	Prepared Ar	Analyzed CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	מנ			
Total Suspended Solids	ND mg/L	5.0 1	07/14	07/14/11 14:02	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	)-H+B			
pH at 25 Degrees C	<b>7.1</b> Std. Units	0.10 1	07/14	07/14/11 15:55	H6
300.0 IC Anions	Analytical Method: EPA 300.0	.0			
Nitrate as N	<b>2.7</b> mg/L	0.10 1	07/14	07/14/11 19:11 14797-55-8	H.
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	.0			
Fluoride Sulfate	<b>7.0</b> mg/L <b>398</b> mg/L	0.20 1 100 100	07/25 07/26	07/25/11 19:46 16984-48-8 07/26/11 09:45 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	. <u>¬</u>			
Nitrogen, Ammonia	<b>3.1</b> mg/L	0.10 1	07/19	07/19/11 18:11 7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	.4			
Phosphorus	<b>0.53</b> mg/L	0.10 1	07/25	07/25/11 15:43 7723-14-0	
Sample: WT003	Lab ID: 60102514002	Collected: 07/12/11 06:15	5 Received: 07/13/11 22:32	22:32 Matrix: Water	
Parameters	Results Units	Report Limit DF	Prepared Ar	Analyzed CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	D			
Total Suspended Solids	ND mg/L	5.0 1	07/14	07/14/11 14:02	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	)-H+B			
pH at 25 Degrees C	7.1 Std. Units	0.10 1	07/14	07/14/11 15:55	Н6
300.0 IC Anions	Analytical Method: EPA 300.0	.0			
Nitrate as N	<b>2.2</b> mg/L	0.10 1	07/14	07/14/11 18:57 14797-55-8	ij
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	.0			
Fluoride Sulfate	<b>7.0</b> mg/L <b>754</b> mg/L	0.20 1 100 100	07/25 07/26	07/25/11 20:12 16984-48-8 07/26/11 09:59 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	. <u>¬</u>			
Nitrogen, Ammonia	<b>11.3</b> mg/L	0.50 1	07/19	07/19/11 19:10 7664-41-7	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	.4			
Phosphorus	ND mg/L	0.10 1	07/25	07/25/11 15:47 7723-14-0	

Date: 07/27/2011 08:05 AM



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60102514

QC Batch Method: QC Batch: SM 2540D WET/30018 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 60102514001, 60102514002

METHOD BLANK: 844793 Matrix: Water

Associated Lab Samples: Parameter 60102514001, 60102514002 Units Blank Result Reporting Limit Analyzed Qualifiers

SAMPLE DUPLICATE: 844794

Total Suspended Solids

mg/L

R

5.0

07/14/11 14:00

Total Suspended Solids Parameter mg/L Units 60102496001 Result 27.0 Result Dup 19.0 RPD 35 Max RPD 25 R1 Qualifiers

SAMPLE DUPLICATE: 844795

Total Suspended Solids Parameter mg/L Units 60102462002 Result  $\frac{1}{2}$ Result Dup ND RPD Max RPD 25 Qualifiers



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60102514

QC Batch: SM 4500-H+B WET/30027 Analysis Method: 4500H+B pH SM 4500-H+B

QC Batch Method: Analysis Description:

Associated Lab Samples: 60102514001, 60102514002

pH at 25 Degrees C	Parameter	SAMPLE DUPLICATE: 844930
Std. Units	Units	844930
7.8	60102136005 Result	
7.8	Result	J
0	RPD	
	RPD	•
5 H6	Qualifiers	



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60102514

QC Batch Method: QC Batch: EPA 300.0 WETA/16979 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60102514001, 60102514002

METHOD BLANK: 844820 Matrix: Water

Associated Lab Samples: 60102514001, 60102514002

Nitrate as N Parameter mg/L Units Result Blank R Reporting Limit 0.10 07/14/11 18:28 Analyzed Qualifiers

Nitrate as N LABORATORY CONTROL SAMPLE: 844821 Parameter mg/L Units Conc. Spike 2.5 Result LCS 2.4 % Rec LCS 97 % Rec Limits 90-110 Qualifiers

Nitrate as N MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 60102517001 Result 844822 1.4 Spike Conc. NS. 2.5 Spike Conc. MSD 2.5 844823 Result S 3.4 Result MSD 3.5 % Rec S 84 MSD % Rec 86 Limits % Rec 68-120 RPD RPD \_ Max 16 Qual

Nitrate as N MATRIX SPIKE SAMPLE: Parameter mg/L 844824 Units 60102472001 Result 1.2 Conc. Spike 2.5 Result S 3.4 % Rec S 87 % Rec Limits 68-120 Qualifiers



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60102514

QC Batch Method: QC Batch: EPA 300.0 WETA/17079 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60102514001, 60102514002

Fluoride Sulfate Associated Lab Samples: METHOD BLANK: 849771 Parameter 60102514001, 60102514002 mg/L mg/L Units Result Blank Matrix: Water N N Reporting Limit 0.20 1.0 07/25/11 13:02 07/25/11 13:02 Analyzed Qualifiers

METHOD BLANK: 850274 Matrix: Water

Associated Lab Samples: 60102514001, 60102514002

Fluoride Sulfate Parameter mg/L mg/L Units Result Blank N N Reporting Limit 0.20 <u>.</u>0 07/26/11 08:53 07/26/11 08:53 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 849772

Fluoride Sulfate Parameter mg/L mg/L Units Conc. Spike 10 S Result LCS 4.9 10.2 % Rec CS 99 102 % Rec Limits 90-110 90-110 Qualifiers

LABORATORY CONTROL SAMPLE: 850275

Sulfate Parameter mg/L Units Spike Conc. S Result LCS 4.6 % Rec LCS 92 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 849773

849774

Fluoride Sulfate Parameter mg/L mg/L Units 60102516002 Result 466 R Spike Conc.  $S_{N}$ 125 250 Spike Conc. MSD 125 250 Result SN 121 726 Result MSD 122 736 % Rec  $S_{N}$ 104 94 % Rec MSD 108 95 % Rec Limits 75-110 61-119 RPD **→** 0 RPD Max 10 6 Qual

MATRIX SPIKE SAMPLE: 849775

Fluoride Sulfate		
	Parameter	
mg/L mg/L	Units	0+07.70
ND 123	60102359001 Result	
25 50	Spike Conc.	
23.8 169	MS Result	
92 92	MS % Rec	
75-110 61-119	% Rec Limits	
	Qualifiers	

Date: 07/27/2011 08:05 AM

REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60102514

QC Batch Method: QC Batch: EPA 350.1 WETA/17015 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 60102514001, 60102514002

METHOD BLANK: 846940 Matrix: Water

Nitrogen, Ammonia Associated Lab Samples: Parameter 60102514001, 60102514002 mg/L Units Result Blank R Reporting Limit 0.10 07/19/11 17:57 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 846941

Nitrogen, Ammonia Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 107 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 846942 Units 60102486002 Result <u>ω</u> Spike Conc. N Result  $S_{N}$ 4.8 % Rec SM 8 % Rec Limits 90-110 M0 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 846943 Units 60102487001 Result 8.4 Spike Conc. 6 Result  $S_{N}$ 18.1 % Rec SN 97 % Rec Limits 90-110 Qualifiers

SAMPLE DUPLICATE: 846944

Nitrogen, Ammonia Parameter mg/L Units 60102520001 Result N Result Dup ND RPD Max RPD 8 Qualifiers



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60102514

QC Batch Method: QC Batch: EPA 365.4 WETA/17058 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 60102514001, 60102514002

Associated Lab Samples: METHOD BLANK: 848686 Parameter 60102514001, 60102514002 Units Result Blank Matrix: Water Reporting Limit Analyzed

mg/L

R

0.10

07/25/11 15:35

Qualifiers

LABORATORY CONTROL SAMPLE: 848687

**Phosphorus** 

Phosphorus Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 106 % Rec Limits 90-110 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 848688 Units 60102520001 Result 0.10 Spike Conc. N Result  $S_{N}$ 2.3 % Rec SM 109 % Rec Limits 72-121 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 848689 Units 60102520002 Result ND Spike Conc. N Result  $S_{N}$ 2.2 % Rec SM 109 % Rec Limits 72-121 Qualifiers

SAMPLE DUPLICATE: 848690

Phosphorus Parameter mg/L Units 60102520003 Result N Result Dup ND RPD Max RPD 15 Qualifiers



Pace Analytical Services, Inc Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 60102514

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes

#### LABORATORIES

Pace Analytical Services - Kansas City

#### **ANALYTE QUALIFIERS**

포 Analysis conducted outside the EPA method holding time.

吊 Analysis initiated more than 15 minutes after sample collection.

MO Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

RPD value was outside control limits.

Page 12 of 12



September 26, 2011

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES
Pace Project No.: 60105587

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on September 06, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sherri Guess

sherri.guess@pacelabs.com Project Manager

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, Fl Missouri Remediation Trust





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 60105587

Washington Certification IDs
940 South Harney Street, Seattle, WA 98108
Alaska CS Certification #: UST-025
Arizona Certification #: AZ0770
California Certification #: 01153CA

Florida/NELAP Certification #: E87617 Oregon Certification #: WA200007 Washington Certification #: C555

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055 Nevada Certification #: KS000212008A Oklahoma Certification #: 9205/9935 Texas Certification #: T104704407-08-TX Utah Certification #: 9135995665



#### SAMPLE SUMMARY

Project: MONTHLY NPDES

Pace Project No.: 60105587

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60105587001	SL001	Water	09/06/11 13:10	09/06/11 22:37
60105587002	WT003	Water	09/06/11 13:00	09/06/11 22:37



## SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES

Pace Project No.: 60105587

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60105587001	SL001	SM 2540D	KLB	1	PASI-K
		SM 4500-H+B	JML	<b>→</b>	PASI-K
		EPA 300.0	JPF	_	PASI-K
		EPA 300.0	KMT	2	PASI-S
		EPA 350.1	SRM1	_	PASI-K
		EPA 365.4	SRM1	_	PASI-K
60105587002	WT003	SM 2540D	KLB	_	PASI-K
		SM 4500-H+B	JML	_	PASI-K
		EPA 300.0	JPF	_	PASI-K
		EPA 300.0	KMT	2	PASI-S
		EPA 350.1	SRM1	_	PASI-K
		EPA 365.4	SRM1	<b>_</b>	PASI-K

## **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 60105587

Lab ID: 6		Collected: 09/06/1	1 13:10	Received: 09		latrix: Water	
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Analytical N	/ethod: SM 2540[						
9.0	mg/L	5.0	_		09/08/11 09:22		
Analytical N	/lethod: SM 4500-	H+B					
8.8	Std. Units	0.10	_		09/07/11 14:30		H6
Analytical N	/lethod: EPA 300.0	0					
4.2	mg/L	0.10	_		09/07/11 15:07	14797-55-8	오
Analytical N	/lethod: EPA 300.0	0					
4.5 860	mg/L mg/L	1.0 50.0	50		09/22/11 08:31 09/22/11 06:36	16984-48-8 14808-79-8	
Analytical N	/lethod: EPA 350.	_					
5.2	mg/L	0.50	Ŋ		09/20/11 10:24	7664-41-7	
Analytical N	/ethod: EPA 365.	42					
0.28	mg/L	0.10	_		09/15/11 16:00	7723-14-0	
Lab ID: 6		Collected: 09/06/1	1 13:00	Received: 09	~	latrix: Water	
Results	Units	Report Limit	무	Prepared	Analyzed	CAS No.	Qual
Analytical N	/lethod: SM 2540[	O					
5.0	mg/L	5.0	_		09/08/11 09:23		
Analytical N	/lethod: SM 4500-	H+B					
7.0	Std. Units	0.10	_		09/07/11 14:30		H6
Analytical N	/lethod: EPA 300.0	0					
2.6	mg/L	0.10	_		09/07/11 14:37	14797-55-8	오
Analytical N	/lethod: EPA 300.0	0					
4.0 1120	mg/L mg/L	2.0 100	10 100		09/22/11 08:12 09/22/11 06:55	16984-48-8 14808-79-8	
Analytical N	/lethod: EPA 350.	_					
11.8	mg/L	0.50	Ŋ		09/20/11 10:27	7664-41-7	
Analytical N	/ethod: EPA 365.	4					
ND	mg/L	0.10	_		09/15/11 16:01	7723-14-0	
	Results Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N Analytical N ND	Results Units Analytical Method: SM 25401 9.0 mg/L Analytical Method: SM 4500- 8.8 Std. Units Analytical Method: EPA 300.0 4.2 mg/L Analytical Method: EPA 300.0 4.5 mg/L Analytical Method: EPA 300.0 5.2 mg/L Analytical Method: EPA 350.0 5.0 mg/L Analytical Method: EPA 350.0 7.0 Std. Units Analytical Method: EPA 300.0 2.6 mg/L Analytical Method: EPA 300.0 11.8 mg/L Analytical Method: EPA 300.0 11.8 mg/L Analytical Method: EPA 350.0	Units  Junits   ollected: 09/06/11 Report Limit	ollected: 09/06/11 13:10 Report Limit DF  5.0 1  5.0 1  4+B  0.10 1  0.10 1  0.50 5  0.50 5  0.10 1  HB  0.10 1  0.50 5  0.50 5  0.10 1  0.50 5  0.10 1  0.10 1  0.10 1	Negorit Limit   DF   Prepared   Analyzed	Negorit Limit   DF   Prepared   Analyzed	

Date: 09/26/2011 08:26 AM



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60105587

QC Batch Method: QC Batch: SM 2540D WET/30860 Analysis Method: SM 2540D

Analysis Description: 2540D Total Suspended Solids

Associated Lab Samples: 60105587001, 60105587002

METHOD BLANK: 871857 Matrix: Water

Associated Lab Samples: Total Suspended Solids Parameter 60105587001, 60105587002 mg/L Units Blank Result R Reporting Limit 5.0 09/08/11 09:17 Analyzed Qualifiers

SAMPLE DUPLICATE: 871858

Total Suspended Solids Parameter mg/L Units 60105437001 Result 6.0 Result Dup 9.0 RPD 40 Max RPD 25 R1 Qualifiers

SAMPLE DUPLICATE: Total Suspended Solids Parameter 871859 Units 60105581006 Result 18.0 Result Dup 13.0 RPD 32 Max RPD 25 R1 Qualifiers

mg/L

Date: 09/26/2011 08:26 AM



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60105587

QC Batch Method: QC Batch: SM 4500-H+B WET/30848 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 60105587001, 60105587002

SAMPLE DUPLICATE: 871636 Parameter Units 60105577001 Result Result Dup RPD Max RPD Qualifiers

pH at 25 Degrees C

Std. Units

6.3

6.3

0

5 H6

Date: 09/26/2011 08:26 AM



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60105587

QC Batch Method: QC Batch: EPA 300.0 WETA/17501 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60105587001, 60105587002

METHOD BLANK: 871172 Matrix: Water

Nitrate as N Associated Lab Samples: Parameter 60105587001, 60105587002 mg/L Units Result Blank R Reporting Limit 0.10 09/07/11 09:32 Analyzed Qualifiers

Nitrate as N LABORATORY CONTROL SAMPLE: 871173 Parameter mg/L Units Conc. Spike 2.5 Result LCS 2.4 % Rec LCS 96 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter Units 60105577001 Result 871174 Spike Conc. SN Spike Conc. MSD 871175 Result S Result MSD % Rec S MSD % Rec % Rec Limits RPD RPD Max

Qual

Nitrate as N MATRIX SPIKE SAMPLE: Nitrate as N Parameter mg/L mg/L 871176 Units R 60105587002 2.5 Result 2.6 2.5 Conc. Spike 2.5 ა ა Result S S ω ω 5.1 132 % Rec S 102 132 % Rec 68-120 Limits 68-120 0 Qualifiers 16 M0



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60105587

QC Batch Method: QC Batch: EPA 300.0 WETA/2187 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60105587001, 60105587002

Fluoride Sulfate Associated Lab Samples: METHOD BLANK: 86194 Parameter 60105587001, 60105587002 mg/L mg/L Units Result Blank Matrix: Water  $\frac{1}{6}$ Reporting Limit 0.20 1.0 09/22/11 00:10 09/22/11 00:10 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L mg/L 86195 Units Conc. Spike 15 2 Result LCS 16.1 <u>-1</u> % Rec 92 107 Limits % Rec 90-110 90-110 Qualifiers

Sulfate Fluoride MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L mg/L Units 60105471001 Result 86196 3640 R Spike Conc. S 100 7500 Spike Conc. MSD 100 7500 86197 Result S 83.5 11100 Result MSD 85.5 11200 % Rec S 100 83 % Rec MSD 100 100 % Rec 90-110 90-110 Limits RPD 51 12 RPD Max 10 M1 Qual

Fluoride Sulfate	MATRIX
	MATRIX SPIKE SAMPLE: Parameter
mg/L	86198 Units
2.7	60105346008
ND	Result
15	Spike
15	Conc.
4.3	MS
15.8	Result
81	MS
100	% Rec
90-110 M1	% Rec
90-110	Limits
M1	Qualifiers



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60105587

QC Batch Method: QC Batch: EPA 350.1 WETA/17625 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 60105587001, 60105587002

Associated Lab Samples: METHOD BLANK: 877946 60105587001, 60105587002 Matrix: Water

Nitrogen, Ammonia Parameter mg/L Units Result Blank R Reporting Limit 0.10 09/20/11 08:45 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 877947

Nitrogen, Ammonia Parameter mg/L Units Conc. Spike N Result LCS 2.0 % Rec LCS 100 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 877948

Nitrogen, Ammonia Parameter mg/L Units 60105587001 Result 5.2 Spike Conc. 6 Result SM 15.1 % Rec SM 99 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 877949

Nitrogen, Ammonia Parameter mg/L Units 60105587002 Result 11.8 Spike Conc. 6 Result  $S_{N}$ 21.1 % Rec SN 92 % Rec Limits 90-110 Qualifiers

SAMPLE DUPLICATE: 877950

Nitrogen, Ammonia Parameter mg/L Units 60105589001 Result <u>-</u> Result Dup <u>-</u> RPD Max RPD 8 Qualifiers



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60105587

QC Batch Method: QC Batch: EPA 365.4 WETA/17590 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 60105587001, 60105587002

Associated Lab Samples: METHOD BLANK: 875483 60105587001, 60105587002 Blank Matrix: Water Reporting

Units

Result

Limit

Analyzed

Qualifiers

**Phosphorus** Parameter mg/L R 0.10 09/15/11 15:35

LABORATORY CONTROL SAMPLE: 875484

Phosphorus Parameter mg/L Units Conc. Spike N Result LCS 2.0 % Rec LCS 100 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 875485

Phosphorus Parameter mg/L Units 60105446001 Result 4.0 Spike Conc. N Result  $S_{N}$ 4.9 % Rec SM 49 % Rec Limits 72-121 M0 Qualifiers

MATRIX SPIKE SAMPLE: 875486

Phosphorus Parameter mg/L Units 60105446003 Result 4.2 Spike Conc. N Result  $S_{N}$ 4.9 % Rec S 39 % Rec Limits 72-121 M0 Qualifiers

SAMPLE DUPLICATE: 875487

Phosphorus Parameter mg/L Units 60105744001 Result 4.5 Result Dup 4.5 RPD Max RPD 15 Qualifiers



Pace Analytical Services, Inc Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.:

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes

#### LABORATORIES

PASI-K Pace Analytical Services - Kansas City

PASI-S Pace Analytical Services - Seattle

#### **ANALYTE QUALIFIERS**

오 The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased

H6 Analysis initiated more than 15 minutes after sample collection.

MO Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

 $\leq$ Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

RPD value was outside control limits.

Page 12 of 12



# CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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#### Pace Analytical

## Sample Condition Upon Receipt

Client Name: FI MO Project # 45HE0109

Lot # of added preservative Y / N	ONIA 10.  ONIA 11.  ONIA 12.  ONIA 13.  Initial when completed completed normal 15.  ONIA 15.  ONIA 17. List State:		DYes ONO ONIA 9.  DYes ONO ONIA 10.  OYes ONO ONIA 11.  OYes ONO ONIA 12.  DYes ONO ONIA 13.  In DYes ONO ONIA 14.  OYes ONO ONIA 14.  OYes ONO ONIA 15.  OYes ONO ONIA 15.  OYes ONO ONIA 15.  OYes ONO ONIA 16.  OYes ONO ONIA 17.  OYes ONO ONIA 17.  OYes ONO ONIA 17.  OYes ONO ONIA 17.  OYes ONO ONIA 17.  OYes ONO ONIA 17.  OYes ONO ONIA 17.  OYes ONO ONIA 17.	Correct containers used:  -Pace containers used:  Containers intact:  Unpreserved 5035A soils frozen w/in 48hrs?  Filtered volume received for dissolved tests  Sample labels match COC:  -Includes date/time/ID/analyses Matrix: -Includes date/time/
	PH , No	ON/A	Zyes Ono	Short Hold Time analyses (<72hr):  Rush Turn Around Time requested:  Sufficient volume:
	9 5 4 3	UN/A	Dyes Ono	Sampler name & signature on COC:  Samples arrived within holding time:
	3 2 .	O N/A	Dyes Ono	Chain of Custody present:  Chain of Custody filled out:  Chain of Custody relinquished:
No Proj. Due Date:   0   1   2   1   1   2   1   1   2   1   2   1   2   1   2   1   2   1   2   1   2   1   2   1   2   2	Seals intact: Yes Comments:	Tumercial Label Usec Seals Foam Ice: Wet	ping No	Courier:   Fed Ex   UPS   USPS   Client    Tracking #:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)



October 18, 2011

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES
Pace Project No.: 60107454

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 05, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Showi Ju

Sherri Guess sherri.guess@pacelabs.com Project Manager

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 60107454

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665



#### SAMPLE SUMMARY

Project: MONTHLY NPDES

Pace Project No.: 60107454

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60107454001	SL001	Water	10/03/11 17:30	
60107454002	WT003	Water	10/03/11 17:15	



## SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES

Pace Project No.: 60107454

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60107454001 SL001	SL001	SM 2540D	KLB	_
		SM 4500-H+B	JML	_
		EPA 300.0	JML	2
		EPA 350.1	AJM	_
		EPA 353.2	AJM	_
		EPA 365.4	AJM	_
60107454002	WT003	SM 2540D	KLB	_
		SM 4500-H+B	JML	_
		EPA 300.0	JML	2
		EPA 350.1	AJM	_
		EPA 353.2	AJM	_
		EPA 365.4	AJM	_

## ANALYTICAL RESULTS

Project: MONTHLY NPDES

Pace Project No.: 60107454

Sample: SL001	Lab ID: 60107454001	Collected: 10/03/11 17:30	7:30 Received: 10/05/11 05:25		Matrix: Water	
Parameters	Results Units	Report Limit [	DF Prepared	Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	D D				
Total Suspended Solids	ND mg/L	5.0		10/08/11 10:52		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	)0-H+B				
pH at 25 Degrees C	7.6 Std. Units	0.10		10/05/11 15:05		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	0.0				
Fluoride Sulfate	<b>3.9</b> mg/L <b>550</b> mg/L	0.20 50.0 <i>§</i>	1 50	10/17/11 20:45 10/17/11 21:00	16984-48-8 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	0.1				
Nitrogen, Ammonia	<b>5.1</b> mg/L	0.10		10/12/11 17:24	7:24 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2	3.2				
Nitrogen, Nitrate	<b>4.6</b> mg/L	0.20		10/05/11 14:48		
365.4 Total Phosphorus	Analytical Method: EPA 365.4	5.4				
Phosphorus	<b>0.64</b> mg/L	0.10	<b>→</b>	10/06/11 10:41	0:41 7723-14-0	
Sample: WT003	Lab ID: 60107454002	Collected: 10/03/11 17:15	Received:	10/05/11 05:25 Ma	Matrix: Water	
Parameters	Results Units	Report Limit [	DF Prepared	Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	D				
Total Suspended Solids	ND mg/L	5.0		10/08/11 10:52		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	)0-H+B				
pH at 25 Degrees C	7.0 Std. Units	0.10	_	10/05/11 15:05		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	0.0				
Fluoride Sulfate	<b>6.5</b> mg/L <b>854</b> mg/L	0.20 100 1	1 100	10/17/11 21:16 10/17/11 21:31	16984-48-8 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	0.1				
Nitrogen, Ammonia	<b>12.6</b> mg/L	0.50	_	10/12/11 17:56	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2	3.2				
Nitrogen, Nitrate	<b>4.0</b> mg/L	0.50		10/05/11 14:47		
365.4 Total Phosphorus	Analytical Method: EPA 365.4	5.4				
Phosphorus	<b>0.10</b> mg/L	0.10	_	10/06/11 10:42	7723-14-0	

Date: 10/18/2011 03:37 PM



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60107454

QC Batch: WET/31402 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids

Associated Lab Samples: 60107454001, 60107454002

METHOD BLANK: 888686 Matrix: Water

Associated Lab Samples: 60107454001, 60107454002

Total Suspended Solids Parameter mg/L Units Blank Result R Reporting Limit 5.0 10/08/11 10:47 Analyzed Qualifiers

SAMPLE DUPLICATE: 888687

Total Suspended Solids Parameter mg/L Units 60107638001 Result R Result Dup  $\frac{1}{2}$ RPD Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 888688

Total Suspended Solids Parameter mg/L Units 60107477002 Result 105 Result Dup 122 RPD 15 RPDMax 25 Qualifiers



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60107454

QC Batch: QC Batch Method: SM 4500-H+B WET/31355 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 60107454001, 60107454002

SAMPLE DUPLICATE: 886714

pH at 25 Degrees C	Parameter	SAMPLE DUPLICATE: 88671.
Std. Units	Units	714
7.3	60107441001 Result	
7.3	Result	J
0	RPD	
5 H6	RPD	:
	Qualifiers	



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60107454

QC Batch Method: QC Batch: EPA 300.0 WETA/17930 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60107454001, 60107454002

METHOD BLANK: 892340

Fluoride Sulfate Associated Lab Samples: Parameter 60107454001, 60107454002 mg/L mg/L Units Blank Result Matrix: Water  $\frac{1}{6}$ Reporting Limit 0.20 1.0 10/17/11 18:13 10/17/11 18:13 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L 892341 Units Conc. Spike 2.5 5 Result LCS 2.5 5.5 LCS % Rec 98 110 Limits % Rec 90-110 90-110 Qualifiers

Fluoride Sulfate	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 60107 Parameter Units
mg/L	KE DUPLICATE 601 Units
0.49 883	ATE: 892342 60107467001 Result
2.5 250	MS Spike Conc.
2.5 250	MSD Spike Conc.
2.9 1150	892343 MS Result
3.0 1110	MSD Result
98 106	MS % Rec
101 93	MSD % Rec
75-110 61-119	
ωω	Max RPD RPD
10	ax OD Qual



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60107454

QC Batch Method: QC Batch: EPA 350.1 WETA/17888 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 60107454001, 60107454002

METHOD BLANK: 889842 Matrix: Water

Nitrogen, Ammonia Associated Lab Samples: Parameter 60107454001, 60107454002 mg/L Units Result Blank R Reporting Limit 0.10 10/12/11 17:04 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 889843

Nitrogen, Ammonia Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 106 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 889844 Units 60107472001 Result ND Spike Conc. N Result  $S_{N}$ <u>-1</u> % Rec SM 70 % Rec Limits 90-110 M0 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 889845 Units 60107445002 Result 4.2 Spike Conc. N Result  $S_{N}$ 5.7 % Rec  $S_{N}$ 76 % Rec Limits 90-110 M0 Qualifiers

Nitrogen, Ammonia	Parameter	SAMPLE DUPLICATE: 889846
mg/L	Units	
0.18	60107466001 Result	
0.18	Result	ו
<b>-</b>	RPD	
18	RPD	:
	Qualifiers	



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60107454

QC Batch: WETA/17819 Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres

Associated Lab Samples: 60107454001, 60107454002

METHOD BLANK: 886583

Associated Lab Samples: 60407464004 60407464009

Nitrogen, Nitrate Associated Lab Samples: Parameter 60107454001, 60107454002 mg/L Units Result Blank R Reporting Limit 0.10 10/05/11 14:25 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 886584

Nitrogen, Nitrate Parameter mg/L Units Conc. Spike 1.6 Result LCS 1.6 % Rec LCS 101 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: Parameter 886585 Units 60107471001 Result : Spike Conc. 1.6 Result SM 2.7 % Rec SM 98 % Rec Limits Qualifiers

Nitrogen, Nitrate MATRIX SPIKE SAMPLE: Nitrogen, Nitrate Parameter mg/L mg/L 886586 Units 60107471002 Result <u>.</u> Conc. Spike 1.6 Result  $S_{N}$ 2.7 % Rec SN 99 % Rec Limits 90-110 90-110 Qualifiers

SAMPLE DUPLICATE: 886587

Nitrogen, Nitrate Parameter mg/L Units 60107469001 Result <u>-</u> Result Dup <u>-</u> RPD 0 Max RPD 15 Qualifiers



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60107454

QC Batch Method: QC Batch: EPA 365.4 WETA/17823 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 60107454001, 60107454002

METHOD BLANK: 886810 Matrix: Water

**Phosphorus** Associated Lab Samples: Parameter 60107454001, 60107454002 mg/L Units Result Blank R Reporting Limit 0.10 10/06/11 10:11 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 886811 Spike LCS LCS

Phosphorus Parameter mg/L Units Conc. N Result 2.1 % Rec 106 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: Parameter mg/L 886812 Units 60107476001 Result ND Spike Conc. N Result  $S_{N}$ 2.2 % Rec SM 109 % Rec Limits 72-121 Qualifiers

Phosphorus Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 886813 Units 60107469001 Result N Spike Conc. N Result  $S_{N}$ 2.2 % Rec SN 108 % Rec Limits 72-121 Qualifiers

SAMPLE DUPLICATE: 886814

Phosphorus Parameter mg/L Units 60107469002 Result N Result Dup ND RPD Max RPD 15 Qualifiers



Pace Analytical Services, Inc Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 60107454

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes

#### **ANALYTE QUALIFIERS**

Analysis initiated more than 15 minutes after sample collection.

 $\leq$ Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.



November 14, 2011

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES
Pace Project No.: 60109295

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 01, 2011. The results relate only to the samples included in this report. Results reported herein conform to the otherwise noted in the body of the report. most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless

If you have any questions concerning this report, please feel free to contact me

Sincerely,

Sherri Guess

sherri.guess@pacelabs.com Project Manager

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 60109295

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665



#### SAMPLE SUMMARY

Project: MONTHLY NPDES

Pace Project No.: 60109295

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60109295001	SL001	Water	11/01/11 07:30	11/01/11 23:40
60109295002	WT003	Water	11/01/11 07:00	11/01/11 23:40



# SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES

Pace Project No.: 60109295

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60109295001	SL001	SM 2540D	KLB	_
		SM 4500-H+B	JML	_
		EPA 300.0	JPF	2
		EPA 350.1	AJM	_
		EPA 353.2	AJM	_
		EPA 365.4	AJM	_
60109295002	WT003	SM 2540D	KLB	_
		SM 4500-H+B	JML	_
		EPA 300.0	JPF	2
		EPA 350.1	AJM	_
		EPA 353.2	AJM	_
		EPA 365.4	AJM	_

#### **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 60109295

Sample: SL001	Lab ID: 60109295001 Collecte	Collected: 11/01/11 07:30	Received: 11/01/11 23:40 Matrix: Water	
Parameters	Results Units Rep	Report Limit DF	Prepared Analyzed CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D			
Total Suspended Solids	ND mg/L	5.0 1	11/04/11 11:18	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B			
pH at 25 Degrees C	6.9 Std. Units	0.10 1	11/02/11 15:00	H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0			
Fluoride Sulfate	<b>3.8</b> mg/L <b>587</b> mg/L	0.20 1 50.0 50	11/11/11 23:43 16984-48-8 11/12/11 00:00 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1			
Nitrogen, Ammonia	<b>3.6</b> mg/L	0.10 1	11/14/11 11:36 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2			
Nitrogen, Nitrate	<b>3.5</b> mg/L	0.10 1	11/02/11 16:16	
365.4 Total Phosphorus	Analytical Method: EPA 365.4			
Phosphorus	<b>0.24</b> mg/L	0.10 1	11/07/11 10:05 7723-14-0	
Sample: WT003	Lab ID: 60109295002 Collecte	Collected: 11/01/11 07:00	Received: 11/01/11 23:40 Matrix: Water	
Parameters	Results Units Rep	Report Limit DF	Prepared Analyzed CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D			
Total Suspended Solids	ND mg/L	5.0 1	11/04/11 11:27	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B			
pH at 25 Degrees C	6.5 Std. Units	0.10 1	11/02/11 15:00	H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0			
Fluoride Sulfate	5.8 mg/L 833 mg/L	0.20 1 50.0 50	11/12/11 00:16 16984-48-8 11/12/11 00:33 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1			
Nitrogen, Ammonia	<b>9.1</b> mg/L	0.50 1	11/14/11 11:40 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2			
Nitrogen, Nitrate	<b>2.7</b> mg/L	0.20 1	11/02/11 16:28	
365.4 Total Phosphorus	Analytical Method: EPA 365.4			
Phosphorus	<b>0.10</b> mg/L	0.10 1	11/07/11 10:06 7723-14-0	



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60109295

QC Batch Method: QC Batch: SM 2540D WET/31880 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 60109295001

Associated Lab Samples: METHOD BLANK: 905164 60109295001 Matrix: Water

Total Suspended Solids Parameter mg/L Units Blank Result R Reporting Limit 5.0 11/04/11 11:14 Analyzed

Qualifiers

SAMPLE DUPLICATE: 905165

Total Suspended Solids Parameter mg/L Units 60109232001 Result 8.0 Result Dup 8.0 RPD 0 Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 905933

Total Suspended Solids Parameter mg/L Units 60109238003 Result 309 Result Dup 366 RPD 17 Max RPD 25 Qualifiers



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60109295

QC Batch: WET/31884 Analysis Method: SM 2540D

QC Batch Method: Associated Lab Samples: 60109295002 SM 2540D Analysis Description: 2540D Total Suspended Solids

METHOD BLANK: 905230 Matrix: Water

Associated Lab Samples: Total Suspended Solids Parameter 60109295002 mg/L Units Blank Result R Reporting Limit 5.0 11/04/11 11:26 Analyzed Qualifiers

Total Suspended Solids SAMPLE DUPLICATE: Parameter 905231 mg/L Units 60109569001 Result 11.0 Result Dup 11.0 RPD 0 Max RPD 25 Qualifiers



### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60109295

QC Batch Method: QC Batch: SM 4500-H+B WET/31843 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 60109295001, 60109295002

SAMPLE DUPLICATE: 903945

pH at 25 Degrees C Parameter Std. Units Units 60109243001 Result 12.1 Result Dup 12.1 RPD 0 Max RPD 5 H6 Qualifiers



### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60109295

QC Batch Method: QC Batch: EPA 300.0 WETA/18264 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60109295001, 60109295002

Associated Lab Samples: METHOD BLANK: 909330 Parameter 60109295001, 60109295002 Units Result Blank Matrix: Water Reporting Limit Analyzed

Fluoride Sulfate mg/L mg/L  $\frac{1}{6}$ 0.20 1.0 11/11/11 21:47 11/11/11 21:47

Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L mg/L 909331 Units Conc. Spike 2.5 5 Result LCS 2.4 4.8 % Rec LCS 96 97 % Rec Limits 90-110 90-110 Qualifiers

Fluoride Sulfate MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 60109293001 Result 909332 121 B Spike Conc. S 50 100 Spike Conc. MSD 50 100 909333 Result SN 47.7 211 Result MSD 46.6 210 % Rec S 90 % Rec MSD 90 % Rec Limits 75-110 61-119 RPD 0 N RPD Max <del>10</del> <del>10</del>

Qual

Fluoride Sulfate MATRIX SPIKE SAMPLE: Parameter mg/L 909334 Units 60109446001 Result 0.51 340 Conc. Spike 2.5 100 Result SN 2.9 416 % Rec  $S_{N}$ 95 76 % Rec Limits 75-110 61-119 Qualifiers



### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60109295

QC Batch Method: QC Batch: EPA 350.1 WETA/18299 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 60109295001, 60109295002

METHOD BLANK: 911054 Matrix: Water

Nitrogen, Ammonia Associated Lab Samples: Parameter 60109295001, 60109295002 mg/L Units Result Blank R Reporting Limit 0.10 11/14/11 11:06 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 911055

Nitrogen, Ammonia Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 103 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: Parameter 911056 Units 60109305006 Result Spike Conc. Result  $S_{N}$ % Rec SM % Rec Limits

MATRIX SPIKE SAMPLE: Nitrogen, Ammonia mg/L 911057 ND N 2.0

97

90-110

Qualifiers

Nitrogen, Ammonia Parameter mg/L Units 60109305007 Result ND Spike Conc. N Result  $S_{N}$ 2.1 % Rec SN 105 % Rec Limits 90-110 Qualifiers

SAMPLE DUPLICATE: 911058

Nitrogen, Ammonia Parameter mg/L Units 60109200001 Result R Result Dup ND RPD Max RPD 8 Qualifiers



### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60109295

QC Batch: WETA/18147 Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres

Associated Lab Samples: 60109295001, 60109295002

Associated Lab Samples: METHOD BLANK: 903915 60109295001, 60109295002 Blank Result Matrix: Water Reporting

Nitrogen, Nitrate Parameter mg/L Units R Limit 0.10 11/02/11 16:07 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 903916

Nitrogen, Nitrate Parameter mg/L Units Conc. Spike <u>1</u>.6 Result LCS 1.5 % Rec LCS 96 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: Parameter 903919 Units 60109293001 Result Spike Conc. Result  $S_{N}$ % Rec SM % Rec Limits 90-110 M0 Qualifiers

MATRIX SPIKE SAMPLE: Nitrogen, Nitrate mg/L 903920 10.5 ∞ 15.7 65

Nitrogen, Nitrate Parameter mg/L Units 60109298001 Result В Spike Conc. 1.6 Result  $S_{N}$ 1.5 % Rec SN 93 % Rec Limits 90-110 Qualifiers

SAMPLE DUPLICATE: 903917

Nitrogen, Nitrate Parameter mg/L Units 60109139005 Result <u>ω</u> Result Dup <u>3.1</u> RPD 0 Max RPD 5 Qualifiers

SAMPLE DUPLICATE: 903918

Nitrogen, Nitrate Parameter mg/L Units 60109139006 Result  $\frac{1}{2}$ Result Dup ND RPD Max RPD 5 Qualifiers



### **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60109295

QC Batch Method: QC Batch: EPA 365.4 WETA/18187 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 60109295001, 60109295002

METHOD BLANK: 905727

Matrix: Water

Associated Lab Samples: 60109295001, 60109295002

**Phosphorus** Parameter mg/L Units Blank Result R Reporting Limit 0.10 11/07/11 09:54 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 905728 Phosphorus Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 106 % Rec Limits 90-110 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 905729 Units 60109439001 Result ND Spike Conc. N Result  $S_{N}$ 2.1 % Rec SM 105 % Rec Limits 72-121 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 905730 Units 60109441001 0.021J Spike Conc. N Result  $S_{N}$ 2.2 % Rec SN 108 % Rec Limits 72-121 Qualifiers

SAMPLE DUPLICATE: 905731

Parameter	
Units	
Result	60109441002
Result	Dup
RPD	
RPD	Max
Qualifiers	
	Units Result Result RPD RPD



Pace Analytical Services, Inc Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 60109295

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes

#### **ANALYTE QUALIFIERS**

Analysis initiated more than 15 minutes after sample collection.

 $\leq$ Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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www.pacelabs.com	ace Analytical	
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# CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Pace Project No./ Lab I.D.	Residual Chlorine (Y/N)			Ammonia	T. Phosphorus Fluoride	Sulfate	T. Suspended Solids Nitrate	pH T. Supported Solids	<b>↓</b> Analysis Test <b>↓</b>	Other	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Methanol	NaOH	HNO <sub>3</sub>	H₂SO₄	Unpreserved	# OF CONTAINERS	M AND ETENDATION FOLLOWS	OSITE /GRAB		COMPOSITE START  TIME	COMP STA	SAMPLE TYPE (G=GRAB C=C	MATRIX CODE (see valid codes	TS T A A P P P P P P P P P P P P P P P P P	WATER WASTE WATER PRODUCT SOIL/SOLID OIL WIPE AIR OTHER TISSUE		SAMPLE ID (A-Z, 0-9 , .) Sample IDS MUST BE UNIQUE	Sample <b>S</b>	ITEM#
			-		<u> </u>	<u> </u>	<b>-</b>	<u> </u>	Y/N		S9.	vativ	Preservatives	-	1			D	COLLECTED	င်		OMP)	to left)	Codes CODE	Valid Matrix Codes  MATRIX CODE		Section D Required Client Information	Section D Required CI	
		Requested Analysis Filtered (Y/N)	tered	is Fil	nalys	ted A	ques	- R		Ш					1	$\  \ $													
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#### Pace Analytical "

# Sample Condition Upon Receipt

Client Name: FI mo Remed.

Project # 66/1/532

Date: \\ \data  \lambda \lambda \lambda \lambda \lambda \\ \data  \lambda \l	ew:	Project Manager Review:
		Comments/ Resolution:
	Da	Person Contacted:
N Field Data Required? Y / N	Resolution: Copy COC to Client?	Client Notification/ Resolution:
אייר 17. List State:	□Yes □No	Project sampled in USDA Regulated Area
	ials ( >6mm): □Yes □No ☑Nua   16	Headspace in VOA vials ( >6mm):
	(if purchased):	Pace Trip Blank lot # (if purchased):
	□Yes □No □NIA 15	Trip Blank present:
Initial when Lot # of added completed preservative	Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water),	Exceptions: VOA, coliform
	All containers needing preservation are found to be in Payes ONO ON/A Compliance with EPA recommendation.	All containers needing preservation are compliance with EPA recommendation.
	All containers needing preservation have been checked.	All containers needing pr
	ne/ID/analyses Matrix:	-Includes date/time/ID/analyses
	COC: Tres ONO ONA 13	Sample labels match COC:
	Filtered volume received for dissolved tests	Filtered volume rece
	Unpreserved 5035A soils frozen w/in 48hrs? □Yes □No □NiA 11	Unpreserved 5035A
	Pres □no □n/a 10	Containers intact:
	used: ÆYes □No □N/A	-Pace containers used:
	, ,	Correct containers used:
	ØYes □No □NIA 8	Sufficient volume:
	Time requested: □Yes ZNO □N/A 7	Rush Turn Around Time requested:
ph No3	Øγes □No	Short Hold Time analyses (<72hr):
	AYes □No	Samples arrived within holding time:
	mature on COC: ☐Yes ☐No ☐N/A 4	Sampler name & signature on COC:
		Chain of Custody relinquished
	led out:   DYes □No □N/A 2	Chain of Custody filled out:
	esent: Ares Ono Onia 1	Chain of Custody present:
Comments:	bove freezing to 6°C	Temperature should be a
Blue None Samples on ice, cooling process has begun		Catharnometer Used:
None Dther	Bubble Wrap Bubble B	Packing Material:
tact: Yes No	Custody Seal on Cooler/Box Present: Yes	Custody Seal on C
Pace Other Exp Optional  Yes A No Proj. Due Date:	#:Pace Shipping Label Used?	Courier: Fed E

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)



December 19, 2011

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES
Pace Project No.: 60111532

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on December 06, 2011. The results relate only to the samples included in this report. Results reported herein conform to the otherwise noted in the body of the report. most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless

If you have any questions concerning this report, please feel free to contact me

Sincerely,

Sherri Guess

sherri.guess@pacelabs.com Project Manager

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, FI Missouri Remediation Trust





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 60111532

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665



#### SAMPLE SUMMARY

Project: MONTHLY NPDES 60111532

Pace Project No.:

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60111532001	SL001	Water	12/05/11 17:00	12/06/11 22:35
60111532002	WT003	Water	12/06/11 10:15	12/06/11 22:35



# SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES

Pace Project No.: 60111532

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60111532001 SL001	SL001	SM 2540D	BGM	
		SM 4500-H+B	오	
		EPA 300.0	JML	
		EPA 350.1	JPF	
		EPA 353.2	AJM	
		EPA 365.4	JPF	
60111532002	WT003	SM 2540D	BGM	
		SM 4500-H+B	욘	
		EPA 300.0	JML	
		EPA 350.1	JPF	
		EPA 353.2	AJM	
		EPA 365.4	JPF	

#### ANALYTICAL RESULTS

Project: MONTHLY NPDES

Pace Project No.: 60111532

<b>Lab ID: 60111532001</b> Cc	ollected: 12/05/11 17:00	Received: 12/06/11 22:35 Matrix: Water	
Results Units	Report Limit DF	Prepared Analyzed CAS No.	Qual
Analytical Method: SM 2540D			
ND mg/L	5.0 1	12/09/11 07:39	
Analytical Method: SM 4500-H	ŦΒ		
7.4 Std. Units	0.10 1	12/07/11 16:00	H6
Analytical Method: EPA 300.0			
<b>1.1</b> mg/L <b>140</b> mg/L	0.20 1 20.0 20	12/16/11 00:28 16984-48-8 12/16/11 00:44 14808-79-8	
Analytical Method: EPA 350.1			
<b>0.98</b> mg/L	0.10 1	12/12/11 13:59 7664-41-7	
Analytical Method: EPA 353.2			
<b>1.4</b> mg/L	0.10 1	12/07/11 13:16	
Analytical Method: EPA 365.4			
<b>0.98</b> mg/L	0.10 1	12/14/11 13:42 7723-14-0	
Lab ID: 60111532002 Cc	ollected: 12/06/11 10:15	Received: 12/06/11 22:35 Matrix: Water	
Results Units	Report Limit DF	Prepared Analyzed CAS No.	Qual
Analytical Method: SM 2540D			
<b>18.0</b> mg/L	5.0 1	12/09/11 09:34	
Analytical Method: SM 4500-H	₽B		
6.2 Std. Units	0.10 1	12/07/11 16:00	H6
Analytical Method: EPA 300.0			
<b>1.0</b> mg/L <b>486</b> mg/L	0.20 1 50.0 50	12/16/11 01:01 16984-48-8 12/16/11 01:17 14808-79-8	
Analytical Method: EPA 350.1			
<b>8.8</b> mg/L	0.30 1	12/12/11 14:00 7664-41-7	
Analytical Method: EPA 353.2			
<b>3.2</b> mg/L	0.10 1	12/07/11 13:25	
Analytical Method: EPA 365.4			
<b>0.10</b> mg/L	0.10 1	12/14/11 13:43 7723-14-0	
	Results Units  Analytical Method: SM 2540D  ND mg/L  Analytical Method: SM 4500-H  7.4 Std. Units  Analytical Method: EPA 300.0  1.1 mg/L  140 mg/L  Analytical Method: EPA 350.1  0.98 mg/L  Analytical Method: EPA 353.2  1.4 mg/L  Analytical Method: EPA 365.4  0.98 mg/L  Analytical Method: EPA 365.4  Analytical Method: EPA 365.4  Analytical Method: EPA 300.0  1.0 mg/L  486 mg/L  Analytical Method: EPA 350.1  8.8 mg/L  Analytical Method: EPA 350.1  8.8 mg/L  Analytical Method: EPA 350.1  8.8 mg/L  Analytical Method: EPA 350.1  8.8 mg/L  Analytical Method: EPA 350.2  3.2 mg/L  Analytical Method: EPA 353.2  3.2 mg/L  Analytical Method: EPA 365.4  0.10 mg/L	ollected: 12/05/11 Report Limit	Ollected: 12/05/11 17:00 Received: 12/06/11 22:35 Marked Report Limit DF Prepared Analyzed An

Date: 12/19/2011 01:39 PM



### **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60111532

QC Batch: SM 2540D WET/32475 Analysis Method: SM 2540D

QC Batch Method: Associated Lab Samples: 60111532001 Analysis Description: 2540D Total Suspended Solids

METHOD BLANK: 923853

Associated Lab Samples: 60111532001 Matrix: Water

Total Suspended Solids Parameter mg/L Units Blank Result R Limit 5.0 12/09/11 07:39 Analyzed Qualifiers

Reporting

SAMPLE DUPLICATE: Total Suspended Solids Parameter 923854 mg/L Units 60111521003 Result R Result Dup 63.0 RPD Max RPD 25 Qualifiers

Date: 12/19/2011 01:39 PM



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60111532

QC Batch Method: QC Batch: SM 2540D WET/32478 Analysis Description: Analysis Method: 2540D Total Suspended Solids SM 2540D

Associated Lab Samples: 60111532002

METHOD BLANK: 923917 Matrix: Water

Associated Lab Samples: Total Suspended Solids Parameter 60111532002 mg/L Units Blank Result R Reporting Limit 5.0 12/09/11 09:32 Analyzed Qualifiers

SAMPLE DUPLICATE: 923918 60111501003 Dup

Total Suspended Solids Parameter mg/L Units Result 82.7 Result 86.7 RPD 5 Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 923919

Total Suspended Solids Parameter mg/L Units 60111534002 Result 154 Result Dup 127 RPD 19 Max RPD 25 Qualifiers



### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60111532

QC Batch Method: QC Batch: SM 4500-H+B WET/32444 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 60111532001, 60111532002

SAMPLE DUPLICATE: 922976 Parameter Units 60111536001 Result Result Dup RPD Max RPD Qualifiers

pH at 25 Degrees C

Std. Units

8.3

8.3

0

5 H6

Date: 12/19/2011 01:39 PM



Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60111532

QC Batch Method: QC Batch: EPA 300.0 WETA/18672 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60111532001, 60111532002

METHOD BLANK: 927131

Associated Lab Samples: 60111532001, 60111532002 Matrix: Water

Fluoride Sulfate Parameter mg/L mg/L Units Result Blank  $\frac{1}{6}$ Reporting Limit 0.20 1.0 12/15/11 21:09 12/15/11 21:09 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L mg/L 927132 Units Conc. Spike 2.5 5 Result LCS 2.4 5.1 % Rec 97 102 Limits % Rec 90-110 90-110 Qualifiers

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 927133 927134

Fluoride Sulfate Parameter mg/L Units 20942018 Result Spike Conc. S 125 250 Spike Conc. MSD 125 250 Result SN 526 119 Result MSD 121 535 % Rec S 96 % Rec MSD 100 97 % Rec 75-110 61-119 Limits RPD N -RPD Max <del>10</del> <del>10</del> Qual

Fluoride Sulfate MATRIX SPIKE SAMPLE: Parameter mg/L 927135 Units 60111569002 Result 133 R Spike Conc. 25 50 Result SN 24.1 175 % Rec  $S_{N}$ 96 83 % Rec Limits 75-110 61-119 Qualifiers



### **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60111532

QC Batch Method: QC Batch: EPA 350.1 WETA/18621 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 60111532001, 60111532002

METHOD BLANK: 924929

Matrix: Water

Associated Lab Samples: Parameter 60111532001, 60111532002 Units Result Blank Reporting Limit Analyzed Qualifiers

Nitrogen, Ammonia mg/L R 0.10 12/12/11 13:33

LABORATORY CONTROL SAMPLE: 924930

Nitrogen, Ammonia Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 106 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 924931

Nitrogen, Ammonia Parameter mg/L Units 60111252001 Result 3.0 Spike Conc. N Result SM 4.5 % Rec SM 77 % Rec Limits 90-110 M0 Qualifiers

MATRIX SPIKE SAMPLE: 924933

Nitrogen, Ammonia Parameter mg/L Units 60111455001 Result ND Spike Conc. N Result  $S_{N}$ <u>~</u> % Rec SN 9 % Rec Limits 90-110 Qualifiers

SAMPLE DUPLICATE: 924932

Nitrogen, Ammonia	Parameter	
mg/L	Units	
93.4	Result	60111503001
93.5	Result	Dup
0	RPD	
18	RPD	Max
	Qualifiers	



### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60111532

QC Batch: WETA/18572 Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 60111532001, 60111532002

METHOD BLANK: 922753 Matrix: Water

Associated Lab Samples:

Nitrogen, Nitrate Parameter 60111532001, 60111532002 mg/L Units Blank Result R Reporting Limit 0.10 12/07/11 13:15 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 922754

Nitrogen, Nitrate Parameter mg/L Units Conc. Spike 1.6 Result LCS 1.7 % Rec LCS 107 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 922755

Nitrogen, Nitrate Parameter mg/L Units 60111509001 Result ND Spike Conc. <u>1</u>.6 Result SM <u>-1</u> % Rec SM 95 % Rec Limits 90-110 Qualifiers

SAMPLE DUPLICATE: 922756

Nitrogen, Nitrate Parameter mg/L Units 60111509002 Result 21.3 Result Dup 20.4 RPD 4 Max RPD 5 Qualifiers



### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60111532

QC Batch Method: QC Batch: EPA 365.4 WETA/18639 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 60111532001, 60111532002

METHOD BLANK: 925555 Matrix: Water
Associated Lab Samples: 60111532001, 60111532002

**Phosphorus** Associated Lab Samples: Parameter 60111532001, 60111532002 mg/L Units Result Blank R Reporting Limit 0.10 12/14/11 13:29 Analyzed Qualifiers

Phosphorus LABORATORY CONTROL SAMPLE: Parameter 925556 mg/L Units Conc. Spike N Result LCS 2.0 % Rec LCS 100 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: Parameter 925557 Units 60111759001 Result Spike Conc. Result  $S_{N}$ % Rec SM % Rec Limits Qualifiers

Phosphorus Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L mg/L 925559 Units 60111543001 Result 2.8  $\stackrel{-}{\sim}$ Spike Conc. N N Result  $S_{N}$ <u>ω</u> 4.5 % Rec SN 100 84 % Rec Limits 72-121 72-121 Qualifiers

SAMPLE DUPLICATE: 925558

Phosphorus Parameter mg/L Units 60111465003 Result R Result Dup ND RPD Max RPD 15 Qualifiers



Pace Analytical Services, Inc Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.:

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes

#### **ANALYTE QUALIFIERS**

Analysis initiated more than 15 minutes after sample collection.

 $\leq$ Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.



January 25, 2012

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES
Pace Project No.: 60113525

#### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on January 11, 2012. The results relate only to the samples included in this report. Results reported herein conform to the otherwise noted in the body of the report. most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless

If you have any questions concerning this report, please feel free to contact me

Sincerely,

Slewi Ju

Sherri Guess
sherri.guess@pacelabs.com

Project Manager

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, Fl Missouri Remediation Trust





Pace Analytical Services, Inc. Lenexa, KS 66219 9608 Loiret Blvd. (913)599-5665

#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 60113525

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665



#### SAMPLE SUMMARY

Project: MONTHLY NPDES

Pace Project No.: 60113525

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60113525001	SL001	Water	01/10/12 14:30	01/11/12 23:45
60113525002	WT003	Water	01/10/12 14:00	01/11/12 23:45



# SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES

Pace Project No.: 60113525

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60113525001	SL001	SM 2540D	CMG	<b>-</b>
		SM 4500-H+B	ᄋ	_
		EPA 300.0	JML	2
		EPA 350.1	AJM	_
		EPA 353.2	Ą	_
		EPA 365.4	AJM	_
60113525002	WT003	SM 2540D	CMG	_
		SM 4500-H+B	ᄋ	_
		EPA 300.0	JML	2
		EPA 350.1	AJM	_
		EPA 353.2	Ę	_
		EPA 365.4	AJM	_

#### **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 60113525

Sample: SL001	Lab ID: 60113525001	Collected: 01/10/12 14:30	0 Received: 01/11/12 23:45	Matrix: Water	
Parameters	Results Units	Report Limit DF	Prepared Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	0D			
Total Suspended Solids	<b>7.0</b> mg/L	5.0 1	01/13/12 10:36	:36	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	0-H+B			
pH at 25 Degrees C	7.4 Std. Units	0.10 1	01/12/12 14:30	:30	H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	0.0			
Fluoride Sulfate	2.3 mg/L 278 mg/L	0.20 1 20.0 20	01/20/12 17:01 01/20/12 17:43	:01 16984-48-8 :43 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	9.1			
Nitrogen, Ammonia	<b>2.0</b> mg/L	0.10 1	01/17/12 13	01/17/12 13:49 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2	3.2			
Nitrogen, Nitrate	<b>2.2</b> mg/L	0.10 1	01/12/12 14:03	:03	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	5.4			
Phosphorus	<b>1.6</b> mg/L	0.10 1	01/18/12 10:06	:06 7723-14-0	
Sample: WT003	Lab ID: 60113525002	Collected: 01/10/12 14:00	0 Received: 01/11/12 23:45	Matrix: Water	
Parameters	Results Units	Report Limit DF	Prepared Analyzed	CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	0D			
Total Suspended Solids	ND mg/L	5.0 1	01/13/12 10:36	:36	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	0-H+B			
pH at 25 Degrees C	6.5 Std. Units	0.10 1	01/12/12 14:30	:30	H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	0.0			
Fluoride Sulfate	<b>2.9</b> mg/L <b>695</b> mg/L	0.20 1 50.0 50	01/20/12 17:57 01/20/12 18:12	01/20/12 17:57 16984-48-8 01/20/12 18:12 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	0.1			
Nitrogen, Ammonia	<b>5.8</b> mg/L	0.20 1	01/17/12 15:02	:02 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2	3.2			
Nitrogen, Nitrate	<b>4.3</b> mg/L	0.10 1	01/12/12 14:01	:01	Ξ.
365.4 Total Phosphorus	Analytical Method: EPA 365.4	5.4			
Phosphorus	ND mg/L	0.10 1	01/18/12 10	0:07 7723-14-0	

Date: 01/25/2012 10:34 AM



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60113525

QC Batch: WET/33041 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids

Associated Lab Samples: 60113525001, 60113525002

Associated Lab Samples: METHOD BLANK: 938803 60113525001, 60113525002 Blank Result Matrix: Water Reporting

Total Suspended Solids Parameter mg/L Units R Limit 5.0 01/13/12 10:35 Analyzed Qualifiers

SAMPLE DUPLICATE: 938804 60113492001 Dup

Total Suspended Solids Parameter mg/L Units Result R Result 8.0 RPD Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 938805

Total Suspended Solids Parameter mg/L Units 60113531003 Result 19.0 Result Dup 19.0 RPD 0 RPDMax 25 Qualifiers



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60113525

QC Batch Method: QC Batch: SM 4500-H+B WET/33030 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 60113525001, 60113525002

pH at 25 Degrees C SAMPLE DUPLICATE: 938381 Parameter Std. Units Units 60113525002 Result 6.5 Result Dup 6.6 RPD Max RPD 5 H6 Qualifiers

Date: 01/25/2012 10:34 AM



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#### **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60113525

QC Batch Method: QC Batch: EPA 300.0 WETA/18987 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60113525001, 60113525002

METHOD BLANK: 940740 Matrix: Water

Fluoride Sulfate Associated Lab Samples: Parameter 60113525001, 60113525002 mg/L mg/L Units Result Blank  $\frac{1}{6}$ Reporting Limit 0.20 1.0 01/20/12 11:42 01/20/12 11:42 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L mg/L 940741 Units Conc. Spike 2.5 5 Result LCS 2.4 4.9 % Rec LCS 94 99 % Rec Limits 90-110 90-110 Qualifiers

Fluoride Sulfate MATRIX SPIKE & MATRIX SPIKE DUPLICATE: Parameter mg/L Units 60113512001 Result 2550 940742 R Spike Conc. S 500 1000 Spike Conc. MSD 1000 500 940743 Result SN 3480 505 Result MSD 498 3540 % Rec S 101 92 % Rec MSD 100 99 % Rec Limits 75-110 61-119 RPD N -RPD Max <del>10</del> <del>10</del> Qual

Fluoride Sulfate MATRIX SPIKE SAMPLE: Parameter mg/L 940744 Units 60113512010 Result ND 22.3 Conc. Spike 12.5 25 Result SN 13.1 43.3 % Rec  $S_{N}$ 98 84 % Rec Limits 75-110 61-119 Qualifiers



### **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60113525

QC Batch Method: QC Batch: EPA 350.1 WETA/18958 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 60113525001, 60113525002

METHOD BLANK: 939616

Nitrogen, Ammonia Associated Lab Samples: Parameter 60113525001, 60113525002 mg/L Units Result Blank Matrix: Water R Reporting Limit 0.10 01/17/12 13:47 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 939617

Nitrogen, Ammonia Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 105 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 939618 Units 60113525001 Result 2.0 Spike Conc. N Result SN 3.9 % Rec SN 98 % Rec Limits 90-110 Qualifiers

Nitrogen, Ammonia MATRIX SPIKE SAMPLE: Parameter mg/L 939619 Units 60113525002 Result 5.8 Spike Conc. 4 Result  $S_{N}$ 9.0 % Rec  $S_{N}$ 80 % Rec Limits 90-110 M0 Qualifiers

SAMPLE DUPLICATE: 939620

Nitrogen, Ammonia	Parameter		
mg/L	Units		
5.3	Result	60113526002	
5.3	Result	Dup	
0	RPD		
18	RPD	Max	
	Qualifiers		



### QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60113525

QC Batch: WETA/18930 Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres

Associated Lab Samples: 60113525001, 60113525002

METHOD BLANK: 938318

Accordance Control Contr

Nitrogen, Nitrate Associated Lab Samples: Parameter 60113525001, 60113525002 mg/L Units Result Blank R Reporting Limit 0.10 01/12/12 13:59 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 938319

Nitrogen, Nitrate Parameter mg/L Units Conc. Spike 1.6 Result LCS 1.7 % Rec LCS 109 % Rec Limits 90-110 Qualifiers

Nitrogen, Nitrate MATRIX SPIKE SAMPLE: Parameter mg/L 938320 Units 60113525002 Result 4.3 Spike Conc. 1.6 Result SN 6.<u>1</u> % Rec SN 112 % Rec Limits 90-110 M0 Qualifiers

Nitrogen, Nitrate MATRIX SPIKE SAMPLE: Parameter mg/L 938322 Units 60113552001 Result 6.5 Spike Conc. 3.2 Result  $S_{N}$ 10.0 % Rec SM 111 % Rec Limits 90-110 M0 Qualifiers

SAMPLE DUPLICATE: 938321

Nitrogen, Nitrate Parameter mg/L Units 60113525001 Result 2.2 Result Dup 2.2 RPD 0 Max RPD 15 Qualifiers



# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60113525

QC Batch Method: QC Batch: EPA 365.4 WETA/18961 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 60113525001, 60113525002

Associated Lab Samples: METHOD BLANK: 939634 60113525001, 60113525002 Blank Matrix: Water Reporting

**Phosphorus** Parameter mg/L Units Result R Limit 0.10 01/18/12 09:41 Analyzed Qualifiers

Phosphorus LABORATORY CONTROL SAMPLE: Parameter 939635 mg/L Units Conc. Spike N Result LCS 2.2 % Rec LCS 109 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: 939636

Phosphorus Parameter mg/L Units 60113595001 Result 0.85 Spike Conc. N Result  $S_{N}$ 3.0 % Rec SN 106 % Rec Limits 72-121 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 939637 Units 60113716001 Result  $\stackrel{-}{\sim}$ Spike Conc. N Result  $S_{N}$ 3. 3. % Rec SN 109 % Rec Limits 72-121 Qualifiers

SAMPLE DUPLICATE: 939638

Phosphorus Parameter mg/L Units 60113539002 Result 2.0 Result Dup 2.0 RPD Max RPD 15 Qualifiers



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#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 60113525

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes

### **ANALYTE QUALIFIERS**

포 Analysis conducted outside the EPA method holding time

ᆼ Analysis initiated more than 15 minutes after sample collection.

Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.



# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MONTHLY NPDES

Pace Project No.: 60113525

Lab ID	Sample ID	QC Batch Method	QC Batch Analytical Method	Analytical Batch
60113525001	SL001	SM 2540D	WET/33041	
60113525001	SL001	SM 4500-H+B	WET/33030	
60113525002	WT003	SM 4500-H+B	WET/33030	
60113525001	SL001	EPA 300.0	WETA/18987	
60113525002	WT003	EPA 300.0	WETA/18987	
60113525001	SL001	EPA 350.1	WETA/18958	
60113525002	WT003	EPA 350.1	WETA/18958	
60113525001	SL001	EPA 353.2	WETA/18930	
60113525002	WT003	EPA 353.2	WETA/18930	
60113525001	SL001	EPA 365.4	WETA/18961	
60113525002	WT003	EPA 365.4	WETA/18961	



February 27, 2012

Keith Brown
PCS Phosphate Company Inc.
PO Box 225
301 State Line Road
Joplin, MO 64802

RE: Project: MONTHLY NPDES
Pace Project No.: 60115383

### Dear Keith Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on February 15, 2012. The results relate only to the samples included in this report. Results reported herein conform to the otherwise noted in the body of the report. most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless

If you have any questions concerning this report, please feel free to contact me

Sincerely,

sherri.guess@pacelabs.com Project Manager Sherri Guess

**Enclosures** 

cc: Mr. Doug Engel, PCS Phosphate Company, Inc. Mr. Kamyar Manesh, Fl Missouri Remediation Trust





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#### **CERTIFICATIONS**

Project: MONTHLY NPDES

Pace Project No.: 60115383

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
lowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665



### SAMPLE SUMMARY

Project: MONTHLY NPDES 60115383

Pace Project No.:

Lab ID 60115383001	Sample ID	<b>Matrix</b> Water	Date Collected 02/14/12 16:45	<b>Date Received</b> 02/15/12 22:30
	SL001	Water	02/14/12 16:	45
60115383002	WT003	Water	02/14/12 16:30	:30



# SAMPLE ANALYTE COUNT

Project: MONTHLY NPDES

Pace Project No.: 60115383

### **ANALYTICAL RESULTS**

Project: MONTHLY NPDES

Pace Project No.: 60115383

Sample: SL001	Lab ID: 60115383001	Collected: 02/14/12 16:45	5 Received: 02/15/12 22:30	0 Matrix: Water	
Parameters	Results Units	Report Limit DF	Prepared Analyzed	ed CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	0D			
Total Suspended Solids	ND mg/L	5.0 1	02/17/12 14:49	14:49	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	0-H+B			
pH at 25 Degrees C	7.6 Std. Units	0.10 1	02/16/12 11:45		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	0.0			
Fluoride Sulfate	<b>2.0</b> mg/L <b>253</b> mg/L	0.20 1 20.0 20	02/23/12 22:08 02/23/12 22:23	22:08 16984-48-8 22:23 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	0.1			
Nitrogen, Ammonia	<b>2.2</b> mg/L	0.10 1	02/22/12 12:45	12:45 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2	3.2			
Nitrogen, Nitrate	<b>2.0</b> mg/L	0.10 1	02/16/12 13:06	13:06	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	5.4			
Phosphorus	<b>1.1</b> mg/L	0.10 1	02/24/12 11:11	11:11 7723-14-0	
Sample: WT003	Lab ID: 60115383002	Collected: 02/14/12 16:30	0 Received: 02/15/12 22:30	0 Matrix: Water	
Parameters	Results Units	Report Limit DF	Prepared Analyzed	ed CAS No.	Qual
2540D Total Suspended Solids	Analytical Method: SM 2540D	0D			
Total Suspended Solids	ND mg/L	5.0 1	02/17/12 14:49	14:49	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B	0-H+B			
pH at 25 Degrees C	6.8 Std. Units	0.10 1	02/16/12 11:45		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0	0.0			
Fluoride Sulfate	<b>3.8</b> mg/L <b>722</b> mg/L	0.20 1 50.0 50	02/23/12 22:38 02/23/12 22:53	22:38 16984-48-8 22:53 14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1	0.1			
Nitrogen, Ammonia	<b>6.7</b> mg/L	0.50 1	02/22/12 1	02/22/12 13:48 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2	3.2			
Nitrogen, Nitrate	<b>4.2</b> mg/L	0.10 1	02/16/12 13:05	13:05	
365.4 Total Phosphorus	Analytical Method: EPA 365.4	5.4			
Phosphorus	<b>0.22</b> mg/L	0.10 1	02/24/12 1	02/24/12 11:14 7723-14-0	

Date: 02/27/2012 02:09 PM



# **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60115383

QC Batch Method: QC Batch: SM 2540D WET/33543 Analysis Method: SM 2540D

Associated Lab Samples: 60115383001, 60115383002 Analysis Description: 2540D Total Suspended Solids

METHOD BLANK: 952766 Matrix: Water

Associated Lab Samples: Total Suspended Solids Parameter 60115383001, 60115383002 mg/L Units Blank Result R Reporting Limit 5.0 02/17/12 14:47 Analyzed Qualifiers

SAMPLE DUPLICATE: 952767

Total Suspended Solids Parameter mg/L Units 60115452001 Result R Result Dup  $\frac{1}{2}$ RPD Max RPD 25 Qualifiers

SAMPLE DUPLICATE: 952768

Total Suspended Solids Parameter mg/L Units 60115382001 Result  $\frac{1}{8}$ Result Dup ND RPD Max RPD 25 Qualifiers



# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60115383

QC Batch Method: QC Batch: SM 4500-H+B WET/33530 Analysis Description: Analysis Method: 4500H+B pH SM 4500-H+B

Associated Lab Samples: 60115383001, 60115383002

SAMPLE DUPLICATE: 952362 Parameter Units 60115275001 Result Result Dup RPD Max RPD Qualifiers

pH at 25 Degrees C

Std. Units

7.9

7.9

0

5 H6

Date: 02/27/2012 02:09 PM



## **QUALITY CONTROL DATA**

Project: MONTHLY NPDES

Pace Project No.: 60115383

QC Batch Method: QC Batch: EPA 300.0 WETA/19297 Analysis Description: Analysis Method: 300.0 IC Anions EPA 300.0

Associated Lab Samples: 60115383001, 60115383002

METHOD BLANK: 955286 Matrix: Water

Associated Lab Samples: 60115383001, 60115383002 Blank Result Reporting

Fluoride Sulfate Parameter mg/L mg/L Units  $\frac{1}{6}$ Limit 0.20 1.0 02/23/12 15:01 02/23/12 15:01 Analyzed Qualifiers

Fluoride Sulfate LABORATORY CONTROL SAMPLE: Parameter mg/L 955287 Units Conc. Spike 2.5 5 Result LCS 2.4 5.0 % Rec 98 101 Limits % Rec 90-110 90-110 Qualifiers

Date: 02/27/2012 02:09 PM



# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60115383

QC Batch Method: QC Batch: EPA 350.1 WETA/19281 Analysis Description: Analysis Method: 350.1 Ammonia EPA 350.1

Associated Lab Samples: 60115383001, 60115383002

METHOD BLANK: 954669

Associated Lab Samples: 60115383001, 60115383002 Matrix: Water

Nitrogen, Ammonia Parameter mg/L Units Result Blank R Reporting Limit 0.10 02/22/12 12:21 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 954670 Spike LCS LCS

Nitrogen, Ammonia Parameter mg/L Units Conc. N Result 2.1 % Rec 106 % Rec Limits 90-110 Qualifiers

MATRIX SPIKE SAMPLE: Parameter 954671 Units 60115393001 Result Spike Conc. Result SN % Rec SN % Rec Limits

MATRIX SPIKE SAMPLE: Nitrogen, Ammonia Parameter mg/L 954672 Units 60115397002 Result 4.6 Spike Conc. N Result  $S_{N}$ 6.2 % Rec SN 80 % Rec Limits 90-110 M0 Qualifiers Qualifiers

Nitrogen, Ammonia mg/L

ND

N

2.2

104

90-110

Nitrogen, Ammonia SAMPLE DUPLICATE: Parameter 954673 mg/L Units 60115335012 Result 12.1 Result Dup 11.9 RPD Ν Max RPD 8 Qualifiers



# QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60115383

QC Batch: WETA/19231 Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres

Associated Lab Samples: 60115383001, 60115383002

METHOD BLANK: 952255

Associated Lab Samples: 60415282001 60415282000

Nitrogen, Nitrate Associated Lab Samples: Parameter 60115383001, 60115383002 mg/L Units Result Blank R Reporting Limit 0.10 02/16/12 13:01 Analyzed Qualifiers

Nitrogen, Nitrate LABORATORY CONTROL SAMPLE: Parameter 952256 mg/L Units Conc. Spike 1.6 Result LCS 1.7 % Rec LCS 108 % Rec Limits 90-110 Qualifiers

Nitrogen, Nitrate MATRIX SPIKE SAMPLE: Parameter mg/L 952257 Units 60115342001 Result 24.6 Spike Conc. 6 Result SN 34.1 % Rec SN 60 % Rec Limits 90-110 M0 Qualifiers

Nitrogen, Nitrate MATRIX SPIKE SAMPLE: Parameter mg/L 952259 Units 60115405001 Result 4.0 Spike Conc. 3.2 Result  $S_{N}$ 7.8 % Rec SN 119 % Rec Limits 90-110 M0 Qualifiers

SAMPLE DUPLICATE: 952258

Nitrogen, Nitrate Parameter mg/L Units 60115383001 Result 2.0 Result Dup 2.0 RPD 0 Max RPD 15 Qualifiers



## QUALITY CONTROL DATA

Project: MONTHLY NPDES

Pace Project No.: 60115383

QC Batch Method: QC Batch: EPA 365.4 WETA/19302 Analysis Description: Analysis Method: 365.4 Phosphorus EPA 365.4

Associated Lab Samples: 60115383001, 60115383002

METHOD BLANK: 955344

Associated Lab Samples: 60115383001, 60115383002

**Phosphorus** Parameter mg/L Units Result Blank Matrix: Water R Reporting Limit 0.10 02/24/12 11:06 Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 955345

Phosphorus Parameter mg/L Units Conc. Spike N Result LCS 2.1 % Rec LCS 105 % Rec Limits 90-110 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 955346 Units 60115477004 Result 0.92 Spike Conc. N Result  $S_{N}$ <u>ω</u> % Rec SN 108 % Rec Limits 72-121 Qualifiers

Phosphorus MATRIX SPIKE SAMPLE: Parameter mg/L 955347 Units 60115383001 Result  $\stackrel{-}{\sim}$ Spike Conc. N Result  $S_{N}$ 3. 3. % Rec SN 109 % Rec Limits 72-121

Qualifiers

SAMPLE DUPLICATE: 955350

Phosphorus Parameter mg/L Units 60115335013 Result 3.3 Result Dup 3.2 RPD ω Max RPD 15 Qualifiers



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#### **QUALIFIERS**

Project: MONTHLY NPDES

Pace Project No.: 60115383

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes

### **ANALYTE QUALIFIERS**

Analysis initiated more than 15 minutes after sample collection.

 $\leq$ Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.



# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MONTHLY NPDES

Pace Project No.: 60115383

	60115383001 SL001 60115383002 WT003	60115383001 SL001	60115383002 WT003								
OC Batch Method	SM 2540D SM 2540D	SM 4500-H+B	SM 4500-H+B	EPA 300.0	EPA 300.0	EPA 350.1	EPA 350.1	EPA 353.2		EPA 353.2	EPA 365.4
OC Ratch Apalytical Mothod	WET/33543 WET/33543	WET/33530	WET/33530	WETA/19297	WETA/19297	WETA/19281	WETA/19281	WETA/19231	WETA/19231	WETA/19302	
Analytical Batch											

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	VATURAL RE L QUALITY I <b>for non-i</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						REPORT APPROVED BY OWNER	REPORT AP
						Pace Analytical	
	•	JALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY	ANALYSES
		EPA 300.0	а	82.7	NONE		SULFATES
		EPA 350.1	മ	0.7	NONE	mg/l	NH <sub>3</sub> - N
	delivery of Materials to replace 80 ft.	EPA 300.0	Ø	0.55	NONE	mg/l	NO <sub>3</sub> - N
	Bypass pipe still out of service. Awaiting	EPA 365.4	Ø	1.10	1.00	HORUS mg/l	PHOSPHORUS
		EPA 300.0	a	ND	8.00	DE mg/l	FLUORIDE
		EPA 170.1	a	44	NONE	TEMPERATURE °F	TEMPER
		EPA 150.1	മ	7.50	6.0 - 9.0	Units	рH
		EPA 160.2	а	21.0	NONE	TOTAL SUSPENDED SOLIDS mg/l	TOTAL :
		ESTIMATE	ь	18	NONE	MGD	FLOW
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS	
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED	DATES OF ANALYSES	DATES
					PCS	SAMPLES COLLECTED BY	SAMPLE
					16:30:00 PM	TIME OF DAY SAMPLED	TIME OF
					12/1/2008	DATE SAMPLED	DATE S.
	THIS REPORT COVERS PERIOD  December 01 Through December 31, 2008	THIS REPORT COVERS PERIOD  December 01 Through		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE	REQUIRED SHORT
Gypsum Stack	diation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627		Former FARMLAND INDUSTRIES Gypsum Stack	Former I
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		AME	FACILITY NAME
	iii	ER DISCHARGES	STEWAT	ISOURCES Wunicipal wa	NATURAL RE L QUALITY T <b>FOR NON-I</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.	MISS DIVIS

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NISSOURI DEPARTMENT OF NATURAL RESOURCES  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.	VATORAL RE LEQUALITY <b>T FOR NON-N</b>	WUNICIPAL WA	STEWAT	ER DISCHARGES	(A)	
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remediation Trust		TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING  OUTFALL #003	ONCE/MONTH GR	ΔB		THIS REPORT COVERS PERIOD  December 01 Through	ber 31, 2008	
DATE SAMPLED	12/1/2008					
TIME OF DAY SAMPLED	16:50:00 PM					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	12/3/2008					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMENTS	NTS
FLOW MGD	NONE	18	σ	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	50	20.0	മ	EPA 160.2		
pH Units	6.0 - 9.0	7.40	മ	EPA 150.1		
TEMPERATURE °F	NONE	46	മ	EPA 170.1		
FLUORIDE mg/l	8.00	ND	മ	EPA 300.0		
PHOSPHORUS mg/l	_	0.17	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	0.97	Ø	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	1.1	മ	EPA 350.1		
SULFATES mg/l	NONE	294	മ	EPA 300.0		
ANALYSES PERFORMED BY			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	VATURAL RE L QUALITY I <b>for non-i</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

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NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES	T FOR NON-N	MUNICIPAL WA	STEWAT	ER DISCHARGE		
FACILITY NAME		PERMIT NUMBER	COUNTY	OWNER		TYPE OF FACILITY
Former FARMLAND INDUSTRIES Gypsum Stack		MO-0053627	JASPER	FI Missouri Remediation Trust	liation Trust	Gypsum Stack
REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PERIOD September 01 Through	THIS REPORT COVERS PERIOD September 01 Through September 30, 2008	
DATE SAMPLED	9/2/2008					
TIME OF DAY SAMPLED	6:30					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	9/3/2008					
PARAMETERS	PERMITTED FINAL LIMITS	ACTUAL RESULTS OF ANALYSIS	SAMPLE TYPE	ANALYTICAL METHOD	REMARKS AND COMMENTS	NTS
FLOW MGD	NONE	18	b	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	NONE	ND	മ	EPA 160.2		
pH Units	6.0 - 9.0	7.20	Ø	EPA 150.1		
TEMPERATURE °F	NONE	70	മ	EPA 170.1		
FLUORIDE mg/l	8.00	2.00	മ	EPA 300.0		
PHOSPHORUS mg/l	1.00	0.62	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	2.20	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	3.8	മ	EPA 350.1		
SULFATES mg/l	NONE	329	Ø	EPA 300.0		
Pace Analytical				S. C.		
REPORT APPROVED BY OWNER						DATE

MISSOURD DE ENARTMENT OF NATURAL RESOURCES           NUISSON OF ENTRONMENTAL CUALITY           ROMITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES           PROBLES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES           CONTROLLED           CONTROLLED         C							
COLUME CIP NO NOTICE S CRITIC NAME   COLUMN	MISSOURI DEPARTMENT OF TO DIVISION OF ENVIRONMENTA NPDES MONITORING REPORT	NATURAL RE L QUALITY <b>I FOR NON-N</b>	SOURCES MUNICIPAL WA	STEWAT	ER DISCHARGE:	(A)	
PROCESSORIES   PROCESSORIES   PROCESSORIES   PROCESSORIES	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remed		TYPE OF FACILITY  Gypsum Stack
MAMPLED  MAPPLED  MAMPLED  MAMPLED  MACH SAMPLED  MACH SAMPLE  MACH SA	REQUIRED FREQUENCY OF MONITORING  OUTFALL #003	ONCE/MONTH GR	4B		THIS REPORT COVERS PE September 01 Thro	nber 30, 2008	
DOMAN SAMPLE   SAS   SCOLLECTED BY   PCS	DATE SAMPLED	9/2/2008					
OF ANALYSES         93/2008         ACTUAL RESULTS         SAMPLE         ANALYTICAL         REMARKS AND COMMEN         PRAMETERS         PRAMETERS         ACTUAL RESULTS         SAMPLE         ANALYTICAL         AMEHOD         REMARKS AND COMMEN         PRAMETERS         ANALYTICAL         AMEHOD         REMARKS AND COMMEN         PRAMETERS         AMEHOD         REMARKS AND COMMEN         AND COMMEN         PAGE         AND COMMEN         AMEHOD         REMARKS AND COMMEN         AND COMMEN	SAMPLES COLLECTED BY	6:45 PCS					
PARAMETERS   PARAMITED   ACTUAL RESULTS   SAMPLE   AVALLYTICAL   REMARKS AND COMMEN	DATES OF ANALYSES	9/3/2008					
PARAMETERS		PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
NACL   NACL   NACL   NACL   NACL   SO   9.0   a   EPA 160.2	PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMEN	UTS
Units 6.0 - 9.0 7.00 a EPA 150.1  PATURE 'F NONE 76 a EPA 170.1  DE mig/l 8.00 5.4 a EPA 300.0  HORUS mig/l 1 0.52 a EPA 300.0  mig/l NONE 15.9 a EPA 300.1  ES mig/l NONE 1020 a EPA 300.0  FERFORMED BY  Page Analytical  SIGNATURE OF ANALYST  REPORT OF THE PAGE ANALYST  SIGNATURE OF ANALYST	SUSPENDED SOLIDS	50	9.0	Ø C	EPA 160.2		
NATURE         %F         NONE         76         a         EPA 170.1           DE         mg/l         8.00         5.4         a         EPA 300.0           HORUS         mg/l         NONE         3.3         a         EPA 300.0           mg/l         NONE         15.9         a         EPA 300.0           ES         mg/l         NONE         1020         a         EPA 300.0           ES         mg/l         NONE         1020         a         EPA 300.0           EPA 300.0         a         EPA 300.0         a         EPA 300.0         a           Pace Analytical         a         EPA 300.0         a         EPA 300.0         a	Ur	6.0 - 9.0	7.00	а	EPA 150.1		
DE mg/l 8.00 5.4 a EPA 300.0 HORUS mg/l 1 0.52 a EPA 365.4  mg/l NONE 3.3 a EPA 300.0  mg/l NONE 15.9 a EPA 300.0  mg/l NONE 1020 a EPA 300.0  a EPA 300.0  BERTORNED BY  Page Analytical  SIGNATURE OF ANALYST  Page Analytical		NONE	76	a	EPA 170.1		
HORUS mg/l 1 0.52 a EPA 305.4  mg/l NONE 3.3 a EPA 300.0  mg/l NONE 15.9 a EPA 350.1  ES mg/l NONE 1020 a EPA 300.0  EPA 300.0  EPA 300.0  A PA 300.0  BERTORNED BY  Pace Analytical  10 0.52 a EPA 300.0  BONTURE OF ANALYST  SONTURE OF ANALYST		8.00	5.4	മ	EPA 300.0		
NONE   3.3   A   EPA 300.0		_	0.52	Ø	EPA 365.4		
NONE   15.9   a   EPA 350.1		NONE	3.3	a	EPA 300.0		
mg/l NONE 1020 a EPA 300.0		NONE	15.9	a	EPA 350.1		
Pace Analytical  SIGNATURE OF ANALYST  SIGNATURE OF ANALYST		NONE	1020	Ø	EPA 300.0		
Pace Analytical  SIGNATURE OF ANALYST							
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Pace Analytical	ANALYSES PERFORMED BY			SIGNATURE OF AN	ALYST		
	Pace Analytical						
	REPORT APPROVED BY OWNER						DATE



# SELS Administrative Services, L.L.C.

4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

January 4, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

continue the water treatment activities and decide on a corrective course of action concentration from Short Creek at the state line is 1.2 milligram per liter. We will December 31, 2006 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 2.80 inches. Please note that the Phosphorus following the planed meeting with EPA and MDNR on January 24, 2007. Enclosed is the NPDES Monitoring Report for the period of December 1, 2006 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



# SELS Administrative Services, L.L.C.

4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

January 5, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

December 31, 2004 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.34 inches. Enclosed is the NPDES Monitoring Report for the period December 1, 2004 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



#### S m S Administrative Services, L.L.

11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

January 7, 2013

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Attention: Lana Cypret

Dear Mrs. Cypret:

Permit Number MO-0053627

Discharge Monitoring Report

Enclosed is the NPDES Monitoring Report for the period of December 1, 2012, through December 31, 2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the new capture system was constructed without a discharge to Short

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of Form A and Form C.
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- The above activities were completed in October 2012

- The Trust retained RSI to make improvements to the access road from Melang Road and cleared the access road to improve visibility in November 2012.
- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- of use of the stack for storage of lead and zinc impacted soils in November 2012 The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation
- The Trust recommends terminating the DMR reports since there is no outfall to sample Until MDNR approves the Trust's request, we will submit this report without any data.

The following activities were completed during December 2012 reporting period

- Shaw completed the service and maintenance of the Leachate Collection System on December 13, 2012. The Leachate Collection system is operating as designed.
- Shaw collected water samples on December 13, 2012, in accordance with the Inspection Report. November 7, 2012 Sampling Plan. The results will be submitted with the System

If you have questions concerning this report or require additional information, please contact me at 913-317-2623

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176 Jefferson City, MO 65102-0176

Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources
PO Box 176

Coffee Con City, MO 65102 0176

Jefferson City, MO 65102-0176

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Sieu Dang



#### SELS Administrative Services, L.L.C.

11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

January 8, 2010

Springfield, MO 65807-5912 Missouri Department of Natural Resources Southwest Regional Office Attention: Lana Cypret 2040 west Woodland Division of Environmental Quality

Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

sampling station and at Outfall #003 were below 1.0 parts per million. Rainfall for the period totaled 2.03 inches. December, 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period of December 1, 2009, through The Phosphate concentration at the Short Creek

eight along the centerline of the proposed slurry wall. The borings were logged and depth to bedrock was identified to assist with the final design. Shaw reviewed soil boring to MDNR in February 2010. the wetland evaluation project with the consultant. We anticipate submitting draft reports currently working on the hydraulic containment system design report and coordinating Wallace, LLC (wetland company) to assist in design and evaluation process. Shaw is and survey data with MDNR and worked on administrative procedures to retain Naturally borings were installed, four borings along the southern extent of the two drains, and was submitted and followed by data collection on September 24, 2009. A total of 12 soil comments and authorization to proceed. On September 15, 2009 a revised work plan August 27, 2009 to define the data gaps and plan for collecting the necessary data to design the proposed containment system. On September 11, 2009 state provided to review alternatives and develop an action plan. The Trust submitted a feasibility study to address the long term containment and treatment of leachate from the gyp stack. The Trust and MDNR met on August 6, 2009 to review alternatives and develop an action plan. The Trust submitted a work plan on treatment of leachate from the gyp stack.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Trust Administrator Kamyar Manesh, P.E.

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



# SELS Administrative Services, L.L.C.

4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

January 4, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Missouri. Rainfall for the period totaled 0.42 inches Enclosed is the NPDES Monitoring Report for the period of December 1, 2005 through December 31, 2005 for the former Farmland Industries Gypstack Property at Joplin,

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Bruce Martin
Cynthia Davis



# SELS Administrative Services, L.L.C.

11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

January 5, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

Rainfall for the period totaled 2.51 inches. December 31, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period of December 1, 2008 through

The Phosphorus concentration at Short Creek sampling point was 1.1 milligram per liter. Based on our discussions with PCS, it appears that the intake by pass pipe is blocked by a beaver dam in the process of replacing 80 feet of the by pass pipe that has been blocked. and very little flow is by passing the system resulting in water going over the low water dam. A professional trapper has been contacted to trap the beavers and remove the dam. PCS is also

On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In letter dated December 17, 2008, the Trust requested for a 90-day extension to address the comments and also initiate a Feasibility Study to evaluate long term remediation options.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



#### SELS Administrative Services, L.L.C.

11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

January 5, 2012

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Attention: Lana Cypret

Dear Mrs. Cypret:

Discharge Monitoring Report Permit Number MO-0053627

Missouri. The phosphate concentration at the Short Creek sampling station was 0.98 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Enclosed is the NPDES Monitoring Report for the period of December 1, 2011, through December 31, 2011, for the former Farmland Industries Gypstack Property at Joplin, Treatment Plant discharge) was 0.10 mg/l. Rainfall for the period totaled 2.76 inches

The following are the highlights of pertinent activities during December 2011.

- On December 14, 2011, Shaw sent "Request for Bid" documents to three subcontractors (EMA, Hulcher, and RSI) to commence construction of the approved leachate collection
- bidders to answer questions. On December 21, 2011, The Trust and Shaw conducted a site walk with the potential
- Shaw and the Trust responded to questions from the bidders during the remaining days
- The bids are due on January 9, 2012

please contact me at 913-317-2623 If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

Kamyar Manesh, P.E Trust Administrator

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



Fax 913.451.2005

#### SELS Administrative Services, L.L.C.

January 10, 2011

Attention: Lana Cypret Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Re: Discharge Monitoring Report

Permit Number MO-0053627

Dear Mrs. Cypret:

Missouri. The phosphate concentration at the Short Creek sampling station was 0.59 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Enclosed is the NPDES Monitoring Report for the period of December 1, 2010, through December 31, 2010, for the former Farmland Industries Gypstack Property at Joplin, Treatment Plant discharge) was 0.19mg/l. Rainfall for the period totaled 1.52 inches

The following are the highlights of pertinent activities during December 2010

- Finalized draft plans and specifications for channel cleanout.
- On December 6, 2010 submitted draft plans for channel cleanout and regrading to
- Requested for clarification on the format of the construction permit
- construction permit and approval for the construction expenditures plans. We are currently waiting to receive comments and/or approval for the December 6, 2010 We are also waiting to receive specific directions on the format of the

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E. Trust Administrator

January 10, 2011
Page 2
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



Fax 913.451.2005

## SELS Administrative Services, L.L.C.

February 2, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

the period totaled 1.31 inches. 31, 2009 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for Enclosed is the NPDES Monitoring Report for the period of January 1, 2009 through January

section of the pipe was also replaced in January 2009. During the repairs the water was going The Phosphorus concentration at Short Creek sampling point was 2.6 milligram per liter. As reported last month the intake by pass pipe was blocked by a beaver dam. An 80-ft damage over the low water dam. An 80-ft damaged

On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In letter dated December 17, 2008, the Trust requested for a 90-day extension to address the comments and also initiate a Feasibility Study to evaluate long term remediation options.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

February 4, 2010

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

31, 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.4 inches. The Phosphate concentration at the Short Creek sampling station and at Outfall #003 were below 1.0 parts per million. Enclosed is the NPDES Monitoring Report for the period of January 1, 2009, through January

evaluation project with the consultant. We anticipate submitting draft reports to MDNR in on the hydraulic containment system design report and coordinating the wetland eight along the centerline of the proposed slurry wall. The borings were logged and depth to bedrock was identified to assist with the final design. Shaw is currently working borings were installed, four borings along the southern extent of the two drains, and was submitted and followed by data collection on September 24, 2009. A total of 12 soil comments and authorization to proceed. On September 15, 2009 a revised work plan August 27, 2009 to define the data gaps and plan for collecting the necessary data to design the proposed containment system. On September 11, 2009 state provided to review alternatives and develop an action plan. treatment of leachate from the gyp stack. The Trust and MDNR met on August 6, 2009 to review alternatives and develop an action plan. The Trust submitted a work plan on February 2010. The Trust submitted a feasibility study to address the long term containment and

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

February 5, 2007

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

January 31, 2007 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 2.54 inches. Enclosed is the NPDES Monitoring Report for the period of January 1, 2007 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

February 6, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

January 31, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.07 inches. Enclosed is the NPDES Monitoring Report for the period of January 1, 2008 through

will be contacting you with regard to the planning, permits and construction schedule in dated January 28, 2008 authorizing us to proceed with the plant relocation project. We In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke the next few weeks.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

<u>C</u>C: Mark Finney, Shaw E&I Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office



11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

February 6, 2013

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Attention: Lana Cypret Division of Environmental Quality

Permit Number MO-0053627 Discharge Monitoring Report

Dear Mrs. Cypret:

exists; the new capture system was constructed without a discharge to Short Creek. January 31, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri There are no sampling and results available for this reporting period. Outfall 003 no longer Enclosed is the NPDES Monitoring Report for the period of January 1, 2013, through

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of Form A and Form C
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing, Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- The above activities were completed in October 2012

- and cleared the access road to improve visibility in November 2012. The Trust retained RSI to make improvements to the access road from Melang Road
- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation of use of the stack for storage of lead and zinc impacted soils in November 2012.
- The Trust recommends terminating the DMR reports since there is no outfall to sample Until MDNR approves the Trust's request, we will submit this report without any data.

The following activities were completed during January 2013 reporting period

- Shaw conducted monthly inspection, repairs and surface water sampling on January 16<sup>th</sup>, and 23<sup>rd,</sup> 2013.
- Shaw constructed a security fence along Malang Road and at SW entrance of the property on January 23, 2013.
- January 28, 2013. Two magnetic flow meters and replacement hoses were ordered for MH1N on
- On January 31, 2013, Shaw submitted the monthly Monitoring Report to MDNR

If you have questions concerning this report or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

February 6, 2013 Page 4

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102-0176

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Sieu Dang



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

February 8, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

January 31, 2005 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 5.1 inches. Enclosed is the NPDES Monitoring Report for the period January 1, 2005 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

February 1, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Missouri. Rainfall for the period totaled 1.05 inches. January 31, 2006 for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of January 1, 2006 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E. Trust Administrator

Trust Administrator

CC: Bruce Martin
Cynthia Davis



Services, L.L.C.

913.317.2623 Fax 913.451.2005

February 7, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

January 31, 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The phosphate concentration at the Short Creek sampling station was 0.38 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was 0.11mg/l. Rainfall for the period totaled 0.26 inches. Enclosed is the NPDES Monitoring Report for the period of January 1, 2011, through

The following are the highlights of pertinent activities during January 2011.

Based on conversation with Mr. Van Dyke on January 12, 2011, MDNR is reviewing the December 6, 2010 draft plans for channel cleanout and regarding. Once this document is approved we will solicit proposals from vendors to start the construction process.

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

 $\frac{1}{2}$ Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

February 9, 2012

Attention: Lana Cypret Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

January 31, 2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The phosphate concentration at the Short Creek sampling station was 0.71 milligram per liter (mg/l). The phosphate was not detected at Outfall #003, (the Wastewater Treatment Plant discharge). Rainfall for the period totaled 0.16 inches. Enclosed is the NPDES Monitoring Report for the period of January 1, 2012, through

The following are the highlights of pertinent activities during December 2011.

- Collection System. Bids for construction of Leachate Collection System were received on January 9, 2012. The Trust with concurrence from MDNR awarded Hulcher to construct the Leachate
- Trust and Hulcher met on January 19, 2011 to discuss mobilization and project logistics
- Hulcher mobilized equipment and personnel on January 23, 2012.
- grubbing were done, and the construction of the catch basin was started. During the last week of January 2012, materials were delivered and staged, clearing and

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

Kamyar Manesh, P.E. Trust Administrator

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust

 $\frac{1}{2}$ Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

March 2, 2009

Springfield, MO 65807-5912 Missouri Department of Natural Resources Southwest Regional Office Attention: Tina White 2040 west Woodland Division of Environmental Quality

Permit Number MO-0053627 Discharge Monitoring Report

Dear Mrs. White

the period totaled 1.61 inches. 28, 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for Enclosed is the NPDES Monitoring Report for the period of February 1, 2009, through February

The Phosphorus concentration at Short Creek sampling point was below 1.0 milligram per liter following the repair of an 80-foot damaged section of the pipe that was replaced in January during the repairs the water was going over the low water dam. 2009. As reported last month, the intake by-pass pipe was blocked by a beaver dam, and

On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In letter dated conducted the following activities: initiate a Feasibility Study to evaluate long-term remediation options. In February 2009, Shaw December 17, 2008, the Trust requested a 90-day extension to address the comments and also

- Addressed MDNR Comments for the WWTP Relocation Construction Permit Application
- Initiated the Focused Feasibility Study
- with the site logistics. Conducted a Site Walk with engineers to familiarize the Feasibility Study team
- Contracted Stantec (NAWE) to conduct the wetlands evaluation
- 0 Identified data gaps
- Selected contractor to provide aerial photograph with 2-foot contours Attended Meeting with MDNR, EPA, and KDHE to discuss constructing a wetland on Short Creek near the Spring River to address mine waste.
- Revised analyte list for the Metals Investigation to include wetland requirements and
- Coordinated sampling for March 3, 2009

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

March 5, 2007

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

Missouri. Rainfall for the period totaled 2.08 inches Enclosed is the NPDES Monitoring Report for the period of February 1, 2007 through February 28, 2007 for the former Farmland Industries Gypstack Property at Joplin,

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

March 7, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Enclosed is the NPDES Monitoring Report for the period February 1, 2005 through February 28, 2005 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 2.36 inches.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

March 7, 2008

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 west Woodland Springfield, MO 65807-5912 Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

the period totaled 3.82 inches. Enclosed is the NPDES Monitoring Report for the period of February 1, 2008 through February 29, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for

the 1.0 milligram per liter permitted amount. As you know we are in the process of performing a feasibility study to enhance the capture system of the gypsum stack. The result form Outfall 003 (effluent of the waste water treatment plant) confirms that the plant is operating effectively removing the phosphate from the influent water. The Phosphorus concentration at Short Creek station was 1.1 milligram per liter which is above

In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated January 28, 2008 authorizing us to proceed with the plant relocation project. We will be contacting you with regard to the planning, permits and construction schedule in the next few

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I



913.317.2623 Fax 913.451.2005

### SELS Administrative Services, L.L.C

March 8, 2010

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

station and at Outfall #003 were below 1.0 parts per million. the period totaled 0.88 inches. The Phosphate concentration at the Short Creek sampling 28, 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for Enclosed is the NPDES Monitoring Report for the period of February 1, 2010, through February

The following is the highlight of pertinent activities during February 2010

- MDNR. The Trust submitted the Treatability Work Plan Treatment Wetland Design document to
- Shaw has been working on resolving design issues related to hydraulic containment
- 2012. terminate the Agreement for operating the existing waste treatment plant on February PCS Phosphate notified the Trust in a letter dated February 22, 2010 that they will

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

C C C Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



11206 Thompson Avenue Lenexa, KS 66219 913-317-2623 Fax: 913-317-2660

March 8, 2013

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

Enclosed is the NPDES Monitoring Report for the period of February 1, 2013, through February 28, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the new capture system was constructed without a discharge to Short Creek.

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- 4. Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- The above activities were completed in October 2012.
- The Trust retained RSI to make improvements to the access road from Melang Road and cleared the access road to improve visibility in November 2012.

- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation of use of the stack for storage of lead and zinc impacted soils in November 2012.
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

# The following activities were completed during January 2013 reporting period

- soils at the property. the EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted The Trust and EPA are negotiating the terms of an access agreement to allow
- CBI, formerly Shaw, conducted monthly inspection, repairs and surface water sampling on February 19<sup>,2</sup> 2013.
- delayed due to inclement weather on February 20, 2013. CBI's attempt to install two magnetic flow meters and replacement hoses were
- Per MDNR's request, CBI attempted to burn the brush pile generated during the clearing of the past year activities

at 913-317-2623 If you have questions concerning this report or require additional information, please contact me

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

Jefferson City, MO 65102-0176 Missouri Department of Natural Resources PO Box 176 Donald Van Dyke, Hazardous Waste Program

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

PO Box 176 Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources

Jefferson City, MO 65102-0176

2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang

Missouri Department of Natural Resources

Division of Environmental Quality Southwest Regional Office



11206 Thompson Avenue Lenexa, KS 66219 913-317-2623 Fax: 913-317-2660

March 8, 2013

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report
Permit Number MO-0053627

Dear Mrs. Cypret:

exists; the new capture system was constructed without a discharge to Short Creek. Enclosed is the NPDES Monitoring Report for the period of February 1, 2013, through February 28, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- The above activities were completed in October 2012.
- and cleared the access road to improve visibility in November 2012 The Trust retained RSI to make improvements to the access road from Melang Road

- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation of use of the stack for storage of lead and zinc impacted soils in November 2012.
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

# The following activities were completed during January 2013 reporting period

- property. The Trust and EPA are negotiating the terms of an access agreement to allow the EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the
- on February 19<sup>,</sup> 2013. CBI, formerly Shaw, conducted monthly inspection, repairs and surface water sampling
- CBI's attempt to install two magnetic flow meters and replacement hoses were delayed due to inclement weather on February 20, 2013.
- Per MDNR's request, CBI attempted to burn the brush pile generated during the clearing of the past year activities

If you have questions concerning this report or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

March 8, 2013

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Attention: Lana Cypret Division of Environmental Quality

Permit Number MO-0053627 Discharge Monitoring Report

Dear Mrs. Cypret:

exists; the new capture system was constructed without a discharge to Short Creek. Enclosed is the NPDES Monitoring Report for the period of February 1, 2013, through February 28, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of Form A and Form C
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing, Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- The above activities were completed in October 2012

- The Trust retained RSI to make improvements to the access road from Melang Road and cleared the access road to improve visibility in November 2012.
- 2012. Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation of use of the stack for storage of lead and zinc impacted soils in November 2012.
- The Trust recommends terminating the DMR reports since there is no outfall to sample Until MDNR approves the Trust's request, we will submit this report without any data.

# The following activities were completed during January 2013 reporting period

- soils at the property. the EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted The Trust and EPA are negotiating the terms of an access agreement to allow
- CBI, formerly Shaw, conducted monthly inspection, repairs and surface water sampling on February 19<sup>,</sup> 2013.
- delayed due to inclement weather on February 20, 2013. CBI's attempt to install two magnetic flow meters and replacement hoses were
- clearing of the past year activities Per MDNR's request, CBI attempted to burn the brush pile generated during the

at 913-317-2623 If you have questions concerning this report or require additional information, please contact me

Sincerely

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

February 6, 2013 Page 4

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102-0176

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Sieu Dang



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

March 2, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

Enclosed is the NPDES Monitoring Report for the period of February 1, 2011, through February 28, 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The phosphate concentration at the Short Creek sampling station was 0.58 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was none detect. Rainfall for the period totaled 2.46 inches.

The following are the highlights of pertinent activities during February 2011.

- December 6, 2010 draft plans for channel cleanout and grading. Based on conversation with Mr. Van Dyke on January 12, 2011, MDNR is reviewing the
- contractor pre-approval process Identified contractors to perform the channel clean out and grading and initiated
- out and grading, but not award the contract. On February 9, 2011, obtained approval from MDNR to solicit bids for the channel clean
- channel clean out and grading. On February 17, 2011, solicited Request for Quotation (RFQ) to contractor for the
- On February 22, 2011, conducted a site walk with the pre qualified contractors and MDNR to answer questions and clarify construction, access, and permitting related

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS
Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 Fax 913.451.2005 913.317.2623

March 9, 2006

Springfield, MO 65807-5912 2040 west Woodland Missouri Department of Natural Resources Division of Environmental Quality Southwest Regional Office

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Missouri. Rainfall for the period totaled 0.01 inches. Enclosed is the NPDES Monitoring Report for the period of February 1, 2006 through February 28, 2006 for the former Farmland Industries Gypstack Property at Joplin,

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Kamyar Manesh, P.E.

Trust Administrator

CC: Cynthia Davis **Bruce Martin** 



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

March 12, 2012

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

February 29, 2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The phosphate concentration at the Short Creek sampling station was 1.1 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was 0.22 mg/l. Rainfall for the period totaled 2.58 inches. The phosphate construction activities. concentration at the Short Creek sampling station was slightly above 1.0 mg/l due to Enclosed is the NPDES Monitoring Report for the period of February 1, 2012, through

The following are the highlights of pertinent activities during February 2012

- Potash Corp (PCS) for operation and maintenance of Water Treatment Plant. On February 8, 2012, the Trust confirmed the termination of interim agreement with
- The construction of Leachate Collection System continued during this reporting period.
- Plant operation and notified MDNR. The Trust met with PCS regarding specific tasks for termination of Water Treatment
- The Trust met with PCS regarding the dismantling and removal of existing Water estimate for dismantling and removal. Treatment Plant. The trust will meet with subcontractors in March 2012 to obtain cost

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E. Trust Administrator

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS
Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

April 2, 2008

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

period totaled 7.63 inches. Enclosed is the NPDES Monitoring Report for the period of March 1, 2008 through March 31, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the

January 28, 2008 authorizing us to proceed with the plant relocation project. We will be contacting you with regard to the planning, permits and construction schedule in the next few weeks In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I



11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

April 6, 2009

Springfield, MO 65807-5912 Missouri Department of Natural Resources Southwest Regional Office Attention: Tina White 2040 west Woodland Division of Environmental Quality

Permit Number MO-0053627 Discharge Monitoring Report

Dear Mrs. White:

period totaled 3.85 inches 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the Enclosed is the NPDES Monitoring Report for the period of March 1, 2009, through March 31,

The Phosphorus concentration at Short Creek sampling point was 1.0 milligram per liter following the repair of an 80-foot damaged section of the pipe that was replaced in January

On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In a letter dated December 17, 2008, the Trust requested a 90-day extension to address the comments and also initiate a Feasibility Study to evaluate long-term remediation options. In March 2009, Shaw conducted the following activities:

- Collected water samples for Metals Investigation, March 3, 2009 Submitted the revised Construction Permit Application on March 12, 2009
- Submitted test data to NAWE to finalize wetland evaluation
- complete. Prepared draft Metals Investigation report, waiting on radionuclide test results to
- Started preparing Focused FS report (slurry wall, cap/cover, lined channel sections)

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Trust Administrator Kamyar Manesh, P.E.

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



11206 Thompson Avenue Fax: 913-317-2660 Lenexa, KS 913-317-2623 66219

April 4, 2013

2040 West Woodland Springfield, MO 65807-5912 Missouri Department of Natural Resources Division of Environmental Quality Southwest Regional Office

Attention: Lana Cypret

Permit Number MO-0053627 Discharge Monitoring Report

Dear Mrs. Cypret:

the new capture system was constructed without a discharge to Short Creek. 31, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists: Enclosed is the NPDES Monitoring Report for the period of March 1, 2013, through March

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing, Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- above activities were completed in October 2012
- and cleared the access road to improve visibility in November 2012 The Trust retained RSI to make improvements to the access road from Melang Road

- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation of use of the stack for storage of lead and zinc impacted soils in November 2012.
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

# The following activities were completed during January 2013 reporting period

- property. The Trust and EPA are negotiating the terms of an access agreement to allow the EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the
- CBI, formerly Shaw, conducted monthly inspection, repairs and surface water sampling on March 13-14, 2013.
- implementation of a Storm Water Pollution Prevention Plan (SWPPP). for emergency sampling and compliance as well as preparation and review and comment. The draft permit is a no discharge permit with provisions On March 27, 2013, the Trust received a draft Missouri State Operating Permit for

If you have questions concerning this report or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Alan Moreau, MDNR Mark Finney, CBI

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

April 5, 2010

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

and at Outfall #003 were below 1.0 parts per million. period totaled 4.29 inches. The Phosphate concentration at the Short Creek sampling station 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the Enclosed is the NPDES Monitoring Report for the period of March 1, 2010, through March 31,

The following is the highlight of pertinent activities during February 2010

- MDNR and received a letter from MDNR indicating an authorization to proceed to the The Trust submitted the Treatability Work Plan Treatment Wetland Design document to next phase
- cost associated with several design options. Shaw has been working on resolving design issues related to hydraulic containment system. Shaw has prepared a summary of letter outlining constructability issues and This document will be submitted to MDNR
- provide dates for this meeting. terminate the Agreement for operating the existing waste treatment plant on February 2012. PCS requested a meeting with MDNR in April 2010. We are waiting on MDNR to PCS Phosphate notified the Trust in a letter dated February 22, 2010 that they will

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

April 7, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

31, 2005 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.08 inches. Enclosed is the NPDES Monitoring Report for the period March 1, 2005 through March

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

April 9, 2007

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

March 31, 2007 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 3.42 inches. Enclosed is the NPDES Monitoring Report for the period of March 1, 2007 through

activities and decide on a corrective course of action after we hear from you about our term plans for treating the seepage from gypstack. We will continue the water treatment Please note that the Phosphorus concentration from Short Creek at Outfall 003 was 1.1 proposal(s) outlined in our March 2, 2007 letter. the reported concentrations. As you know we are working with you on a short and long Suspended Solids were above 50.0 milligram per litter in February and March at Outfall milligram per liter but 0.53 milligram per liter at Short Creek compliance point. The Total We received a letter dated March 14, 2007 from Mr. Kevin Hess (attached) about

information, please contact me at 913-317-2623 If you have questions concerning the attached monitoring data or require additional

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Kevin Hess



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

April 3, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Missouri. Rainfall for the period totaled 1.57 inches March 31, 2006 for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of March 1, 2006 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Bruce Martin
Cynthia Davis



Fax 913.451.2005

#### SELS Administrative Services, L.L.C.

April 9, 2012

Springfield, MO 65807-5912 Missouri Department of Natural Resources Southwest Regional Office 2040 West Woodland Division of Environmental Quality

Attention: Lana Cypret

Dear Mrs. Cypret:

**Discharge Monitoring Report** Permit Number MO-0053627

the new capture and treatment system is being constructed. 31, 2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Enclosed is the NPDES Monitoring Report for the period of March 1, 2012, through March Outfall 003 no longer exists:

The following are the highlights of pertinent activities during March 2012

- The construction of Leachate Collection System continued during this reporting period.
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012 and .
- monitoring during the Leachate Collection construction period. Trust requested MDNR to provide direction with regard to continuing compliance
- (Application for Discharge Permit). The Trust is in the process of completing these Construction or Operating Permit Under Missouri Clean Water Law) and form C MDNR indicated that they need from the Trust a completed Form A (Application for
- There were no samples collected or analyzed during this reporting period

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

Kamyar Manesh, P.E. Trust Administrator

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

April 8, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

discharge) was 0.12 mg/l. Rainfall for the period totaled 5.18 inches phosphate concentration at the Short Creek sampling station was 0.50 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant 31, 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The Enclosed is the NPDES Monitoring Report for the period of March 1, 2011, through March

The following are the highlights of pertinent activities during March 2011.

- implement the channel cleanout and grading. The Trust received verbal authorization to proceed with selection of contractor to
- to MDNR's approval. and were sent to MDNR for input. The Trust will contract with one of the bidders subject A total of six contractors submitted bids to perform the work. The bids were summarized

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

May 3, 2007

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

Rainfall for the period totaled 4.28 inches. 30, 2007 for the former Farmland Industries Gypstack Property at Joplin, Missouri Enclosed is the NPDES Monitoring Report for the period of April 1, 2007 through April

below 50.0 milligram per litter in April 2007. Please note that the Phosphorus concentration from Short Creek at state line was 1.1 milligram per liter but non-detect at outfall 003. The Total Suspended Solids were

corrective course of action after we hear from you about our proposal(s) outlined in our seepage from gypstack. We will continue the water treatment activities and decide on a March 2, 2007 letter. As you know we are working with you on a short and long term plans for treating the

information, please contact me at 913-317-2623 If you have questions concerning the attached monitoring data or require additional

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

May 5, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

period totaled 8.26 inches 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the Enclosed is the NPDES Monitoring Report for the period of April 1, 2009, through April 30,

The Phosphorus concentration at Short Creek sampling point was 1.0 milligram per liter following the repair of an 80-foot damaged section of the pipe that was replaced in January

On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In a letter dated December 17, 2008, the Trust requested a 90-day extension to address the comments and also initiate a Feasibility Study to evaluate long-term remediation options. In April 2009, Shaw conducted the following activities:

- Responded to "Public Notice for Proposed State Operating Permit for Former Farmland Industries Gypstack Leachate Treatment, Jasper County", dated April 3, 2009.
- Worked on the draft Metals Investigation report.
- Received preliminary evaluation and applicability of the engineered wetland
- Prepared draft Metals Investigation report.
- Continued work on the Focused FS report

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



11206 Thompson Avenue Fax: 913-317-2660 Lenexa, KS 913-317-2623 66219

May 6, 2013

2040 West Woodland Springfield, MO 65807-5912 Missouri Department of Natural Resources Division of Environmental Quality Southwest Regional Office

Attention: Lana Cypret

Discharge Monitoring Report

**Т**е:

Permit Number MO-0053627

Dear Mrs. Cypret:

new capture system was constructed without a discharge to Short Creek. 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the Enclosed is the NPDES Monitoring Report for the period of April 1, 2013, through April 30,

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- form C (Application for Discharge Permit). The Trust is waiting for response on status of (Application for Construction or Operating Permit Under Missouri Clean Water Law) and On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- above activities were completed in October 2012
- and cleared the access road to improve visibility in November 2012 The Trust retained RSI to make improvements to the access road from Melang Road

- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation of use of the stack for storage of lead and zinc impacted soils in November 2012.
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

## The following activities were completed during April 2013 reporting period

- May 7, 2013. certain issues with regard to the draft access agreement. This meeting is scheduled for property. The Trust and EPA are negotiating the terms of an access agreement to allow the EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the The Trust Residual Beneficiary wanted to meet with EPA and MDNR to clarify
- CBI, formerly Shaw, conducted monthly inspection, repairs and surface water sampling on April 17, 2013.
- On March 27, 2013, the Trust received a draft Missouri State Operating Permit for MDNR will have the permit available for public review before issuing a final contacted MDNR with questions and clarifications about deliverables in April. implementation of a Storm Water Pollution Prevention Plan (SWPPP). for emergency sampling and compliance as well as preparation and review and comment. The draft permit is a no discharge permit with provisions The Trust

at 913-317-2623. If you have questions concerning this report or require additional information, please contact me

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Alan Moreau, MDNR Mark Finney, CBI

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

April 9, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

for the period totaled 3.12 inches. 2005 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period April 1, 2005 through April 30, Rainfall

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

May 12, 2008

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

Enclosed is the NPDES Monitoring Report for the period of April 1, 2008 through April 30, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 7.42 inches.

January 28, 2008 authorizing us to proceed with the plant relocation project. We will be contacting you with regard to the planning, permits and construction schedule in the next few In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated weeks

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

May 12, 2010

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

and not into the bypass line. PCS indicated that they are in the process of correcting the down failed allowing the inlet of the pipe to raise thus allowing water to run over the dam bypass line had failed. The anchor point that had been installed to hold the end of the pipe concentrations at the Short Creek sampling station is due to the fact the inlet of the 24" Wastewater Treatment Plant discharge) was 0.2 mg/l. We believe the excess phosphate station was 1.6 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.94 inches. The phosphate concentration at the Short Creek sampling spillway. The pond had to be drained to complete the work. the line to the concrete blocks so the inlet of the bypass line will remain lower than the dam problem. PCS planed to install large concrete blocks on the sides of this line and securing Enclosed is the NPDES Monitoring Report for the period of April, 2010, through April 30,

The following is the highlight of pertinent activities during April 2010

- options before proceeding further with planning and construction of the Leachate Chief. We are currently waiting on MDNR to select one of the recommended design all further correspondence to be addressed to Mr. Kevin Hess, Water Pollution Section Evaluation" letter report. On April 6, 2010, the Trust received an e-mail from Ms. Megan Hart advising that "...prior to construction of any pilot program or permanent structure Water Pollution must issue a construction permit." Ms. Hart also indicated that On April 6, 2010, Shaw finalized the "Leachate Management System Design Management System.
- currently waiting on MDNR's instructions implement the column test and pilot testing portion of the proposed Engineered Wetland. MDNR has notified the Trust that based on the schedule and the cost, MDNR wants to On April 27, 2010, the Trust submitted Shaw's scope of work, budget, and schedule to have an internal discussion before issuing its comments on this document. We are

the Trust on May 26, 2010. terminate the Agreement for operating the existing waste treatment plant on February 2012. PCS requested a meeting with MDNR. MDNR has agreed to meet with PCS and PCS Phosphate notified the Trust in a letter dated February 22, 2010 that they will

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

May 3, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Rainfall for the period totaled 4.88 inches. 31, 2006 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period of April 1, 2006 through April

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E. Trust Administrator

Trust Administrator

CC: Bruce Martin
Cynthia Davies



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

May 10, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

phosphate concentration at the Short Creek sampling station was 0.96 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was not detected. Rainfall for the period totaled 6.37 inches. 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The Enclosed is the NPDES Monitoring Report for the period of April 1, 2011, through April 30,

The following are the highlights of pertinent activities during April 2011.

The Trust retained Environmental Management Alternatives (EMA) to perform the channel clean up scope of work. MDNR also approved EMA to perform the work. A slight delay occurred shortly after the start of the project due to heavy rain falls on April 23, 24, and 25<sup>th</sup>. This work is currently in progress.

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

 $\frac{1}{2}$ Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 Fax 913.451.2005 913.317.2623

June 2, 2008

Springfield, MO 65807-5912 Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality 2040 west Woodland

Attention: Tina White

Dear Mrs. White:

Re: Permit Number MO-0053627 Discharge Monitoring Report

Enclosed is the NPDES Monitoring Report for the period of May 1, 2008 through May 31, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 10.79 inches.

January 28, 2008 authorizing us to proceed with the plant relocation project. Shaw is currently working on the design and permitting. The Trust submitted it's NPDES renewal application on September 27, 2007. To date we have not received a response from MDNR regarding the status of our NPDES renewal. The Trust is working on coordinating a meeting with MDNR to In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated review the status of the permits and relocation project.

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Trust Administrator Kamyar Manesh, P.E.

CCMark Finney, Shaw E&I Megan Hart, MDNR, Southwest Regional Office Donald Van Dyke, MDNR, Hazardous Waste Program



913.317.2623 Fax 913.451.2005

### SELS Administrative Services, L.L.C.

June 2, 2010

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

pipe down, failed allowing the inlet of the pipe to raise thus allowing water to run over the were completed in May. The anchor point, that had been installed to hold the end of the station was 0.36 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 7.75 inches. The phosphate concentration at the Short Creek sampling lower than the dam spillway. line and securing the line to the concrete blocks so the inlet of the bypass line now remains dam and not into the bypass line. PCS installed large concrete blocks on the sides of this Wastewater Treatment Plant discharge) was 0.98 mg/l. The repairs to the 24" bypass line Enclosed is the NPDES Monitoring Report for the period of May 1, 2010, through May 31,

The following is the highlight of pertinent activities during April 2010.

currently waiting on MDNR for approval and directions on these proposals. an internal meeting to formulate a response to the proposed leachate collection system and the column tests for design of the Engineered Wet Land proposal. The Trust is at Joplin to recap the progress made to date toward the resolution of proposed remediation and future activities at the site. Mr. Van Dyke indicated that he is planning On May 26, 2010, the representatives of MDNR, PCS, Trust, Shaw, and CERTUS met

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

June 6, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

for the period totaled 3.96 inches. 2005 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period May 1, 2005 through May 31, Rainfall

Please note that the phosphate concentration at Short Creek sampling location sampling location. plan to better understand and remedy the phosphate concentrations at Short Creek Mr. Bruce Martin and Mrs. Cynthia Davis to discuss the results and develop a sampling immediately down gradient of the treatment plant is below 1.0 ppm. I have contacted exceeded 1.0 parts per million (ppm). However, the phosphate concentration

information, please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

June 6, 2007

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

31, 2007 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 5.10 inches. Enclosed is the NPDES Monitoring Report for the period of May 1, 2007 through May

seepage from gypstack. We will continue the water treatment activities and decide on a March 2, 2007 letter. corrective course of action after we hear from you about our proposal(s) outlined in our As you know we are working with you on a short and long term plans for treating the

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator



11206 Thompson Avenue Fax: 913-317-2660 Lenexa, KS 913-317-2623 66219

June 7, 2013

Attention: Lana Cypret 2040 West Woodland Springfield, MO 65807-5912 Missouri Department of Natural Resources Division of Environmental Quality Southwest Regional Office

**Т**е: Permit Number MO-0053627 **Discharge Monitoring Report** 

Dear Mrs. Cypret:

new capture system was constructed without a discharge to Short Creek. 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the Enclosed is the NPDES Monitoring Report for the period of May 1, 2013, through May 31,

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- form C (Application for Discharge Permit). (Application for Construction or Operating Permit Under Missouri Clean Water Law) and On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A

- In September 2012 the Trust awarded a contract to RSI

  1. to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,

Clear and grade the channel,

- Remove the existing crossing and replace it with a rock low water crossing,
- Install a French Drain system along the west toe of the gypsum stack Remove the former waste water treatment plant inlet structure, and
- above activities were completed in October 2012
- and cleared the access road to improve visibility in November 2012 The Trust retained RSI to make improvements to the access road from Melang Road

- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation of use of the stack for storage of lead and zinc impacted soils in November 2012.
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

## The following activities were completed during May 2013 reporting period

- EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the property. The Trust Residual Beneficiary wanted to meet with EPA and MDNR to clarify duration and termination of the Access Agreement. The Residual Beneficiary, EPA, MDNR, and the Trustee met on May 7, 2013, to resolve the Access Agreement issues. a final Access Agreement during the next few months. The parties agreed to enter into an Interim Access Agreement and negotiate the terms of The Trust and EPA were negotiating the terms of an Access Agreement to allow the
- On May 3, 2013, CBI issued March 2013 Monthly Leachate Sampling Report
- CBI, conducted monthly inspection, repairs and surface water sampling on May 23, 2013. Due to heavy rains part of the creek crossing access road was submerged.
- 16, 2013, MDNR made the draft permit available for public review. implementation of a Storm Water Pollution Prevention Plan (SWPPP). for emergency sampling and compliance as well as preparation and review and comment. The draft permit is a no discharge permit with provisions On March 27, 2013, the Trust received a draft Missouri State Operating Permit for On May

If you have questions concerning this report or require additional information, please contact me

Sincerely

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

8 Mark Finney, CBI Alan Moreau, MDNR Sieu Dang, Southwest Regional Office Kevin Hess, MDNR, Water Pollution Section Chief Donald Van Dyke, MDNR, Hazardous Waste Program

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

June 6, 2009

Springfield, MO 65807-5912 Missouri Department of Natural Resources Southwest Regional Office Attention: Lana Cypret 2040 west Woodland Division of Environmental Quality

Permit Number MO-0053627 Discharge Monitoring Report

Dear Mrs. Cypret:

for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 4.43 inches. Enclosed is the NPDES Monitoring Report for the period of May 1, 2009, through May 31, 2009,

The Phosphorus concentration at Short Creek sampling point was 1.1 milligram per liter slightly above the 1.0 milligram per liter. We had 8.25" of rain in April and more than 2" of rain in the first 3 days of May. Short Creek was in high water for 2 or 3 weeks.

On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In a letter dated December 17, 2008, the Trust requested a 90-day extension to address the comments and also initiate a Feasibility Study to evaluate long-term remediation options. In May 2009, Shaw conducted the following activities:

- Submitted Metals Investigation report.
  Submitted the Focused FS report
- Received comments on deficiencies of the waste water construction permit

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Kamyar Manesh, P.E. Trust Administrator

 $\frac{1}{2}$ Megan Hart, MDNR, Southwest Regional Office Donald Van Dyke, MDNR, Hazardous Waste Program

12/27/2013 Page 2 Mark Finney, Shaw E&I Doug Engel, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

June 7, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Tina;

31, 2006 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 7.47 inches. Enclosed is the NPDES Monitoring Report for the period of May 1, 2006 through May

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

June 7, 2012

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

new capture and treatment system is being constructed. 2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the Enclosed is the NPDES Monitoring Report for the period of April 1, 2012, through April 30,

The following are the highlights of pertinent activities during April 2012

- The construction of Leachate Collection System was completed in April 2012.
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- monitoring during the Leachate Collection construction period. Trust requested MDNR to provide direction with regard to continuing compliance
- Construction or Operating Permit Under Missouri Clean Water Law) and form C On April 25, 2012, per MDNR's instruction the Trust a completed Form A (Application for A and Form C. (Application for Discharge Permit). The Trust is waiting for response on status of Form
- There were no samples collected or analyzed during this reporting period

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

Kamyar Manesh, P.E. Trust Administrator

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

June 10, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

(mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was 0.89. Rainfall for the period totaled 7.53 inches. phosphate concentration at the Short Creek sampling station was 2.0 milligram per liter 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The Enclosed is the NPDES Monitoring Report for the period of May 1, 2011, through May 31,

clean out activities were completed. These incidents contributed to the Phosphate concentrations at the Short Creek sampling station. event coincided with extremely high water levels in the short creak shortly after the channel progress. In late May 2011, significant storms and precipitation occurred. The sampling The result of Phosphate concentration at the Short Creek sampling station appears to have been impacted by two factors. In May 2011, the channel clean out activities was in

The following are the highlights of pertinent activities during April 2011.

- The Short Creek Channel clean out activities was completed on May 20, 2011.
- Mr. Vandyke inspected the channel clean out progress on May 11, 2011.
- On May 22, 2001, a category 4-5 storm and tornado devastated the Joplin area. Fortunately, there were no personnel or property damages at the project and PCS site. However, the storm created flooding in the area and in Short Creek.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS
Michael Brom, PCS



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

June 13, 2012

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

new capture system was constructed without a discharge to Short Creek. 2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the Enclosed is the NPDES Monitoring Report for the period of May 1, 2012, through May 31,

The following are the highlights of pertinent activities during May 2012

- The construction of Leachate Collection System was completed in April 2012.
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- On April 25, 2012, per MDNR's instruction the Trust a completed Form A (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of Form A and Form C.
- There were no samples collected or analyzed during this reporting period
- The Trust recommends terminating the DMR reports since there is no outfall to sample Until MDNR approves the Trust's request, we will submit this report without any data.

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information

Sincerely,

Kamyar Manesh, P.E. Trust Administrator

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

July 2, 2007

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

30, 2007 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 17.12 inches. Also enclosed is a copy of the annual WET test for your review. Enclosed is the NPDES Monitoring Report for the period of June 1, 2007 through June

corrective course of action after we hear from you about our proposal(s) outlined in our seepage from gypstack. We will continue the water treatment activities and decide on a March 2, 2007 letter. As you know we are working with you on a short and long term plans for treating the

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

July 2, 2008

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

totaled 9.27 inches. Enclosed is the NPDES Monitoring Report for the period of June 1, 2008 through June 30, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period

January 28, 2008 authorizing us to proceed with the plant relocation project. Shaw is currently working on the design and permitting. The Trust submitted it's NPDES renewal application on September 27, 2007. To date we have not received a response from MDNR regarding the status of our NPDES renewal. In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

July 6, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Rainfall for the period totaled 3.65 inches. 30, 2005 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period of June 1, 2005 through June

June. We will present the results and our evaluation as soon as the data becomes plan to better understand and remedy the phosphate concentrations at Short Creek immediately down gradient of the treatment plant is below 1.0 ppm. I contacted Mr. exceeded 1.0 parts per million (ppm). However, the phosphate concentration available. sampling location. We collected preliminary samples from the seeps and other areas in Bruce Martin and Mrs. Cynthia Davis to discuss the results and developed a sampling Please note that the phosphate concentration at Short Creek sampling location

information, please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Bruce Martin
Cynthia Davis



Fax 913.451.2005

### SELS Administrative Services, L.L.C.

July 6, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

period totaled 4.72 inches. 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the Enclosed is the NPDES Monitoring Report for the period of June 1, 2009, through June 30,

On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In a letter dated conducted the following activities: initiate a Feasibility Study to evaluate long-term remediation options. In June 2009, Shaw December 17, 2008, the Trust requested a 90-day extension to address the comments and also

Responded to deficiencies of the waste water construction permit.

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

July 6, 2010

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

and secured the line to the concrete blocks, so the inlet of the bypass line now remains and not into the bypass line. PCS installed large concrete blocks on the sides of this line down failed, allowing the inlet of the pipe to rise, thus allowing water to run over the dam Wastewater Treatment Plant discharge) was 0.74 mg/l. The repairs to the 24" bypass line were completed in May. The anchor point that had been installed to hold the end of the pipe station was 0.63 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the the period totaled 4.22 inches. The phosphate concentration at the Short Creek sampling 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for lower than the dam spillway. Enclosed is the NPDES Monitoring Report for the period of June 1, 2010, through June 30,

The following are the highlights of pertinent activities during April 2010.

- the dam spillway. Since April, 2010, the phosphorous results have been in compliance and the line was secured to these so the inlet of the bypass line will remain lower than was designed to handle. into the bypass line, this allowed more water to go down the creek than water treatment failed allowing the end of the pipe to rise. This allowed water to run over the dam and not rainfall events, the anchor point that had been installed to hold the end of the pipe down was identified with the inlet of the 24" bypass line and was corrected. Due to extreme Report (DMR), the Trust explained the reasons and corrective actions taken. A problem On June 21, 2010 the Trust received a LETTER OF WARNING regarding the results of the April 2010 phosphorous concentration. In our June 2010 Discharge Monitoring Large concrete blocks were installed on the sides of this line
- to get an internal MDNR meeting to finalize a decision on the design and construction of the Leachate Management System. On May 26, 2010, the representatives of MDNR, Leachate Management Option letter. The Trust understands that Mr. Van Dyke is trying On June 16, 2010, Per Mr. Van Dyke's request, Shaw resubmitted three copies of the

PCS, the Trust, Shaw, and CERTUS met at Joplin to recap the progress made to date toward the resolution of proposed remediation and future activities at the site. Mr. Van on these proposals. Wet Land proposal. The Trust is currently waiting on MDNR for approval and directions proposed leachate collection system and the column tests for design of the Engineered Dyke indicated that he is planning an internal meeting to formulate a response to the

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.

Trust Administrator

CC: Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office



11206 Thompson Avenue Fax: 913-317-2660 Lenexa, KS 913-317-2623 66219

July 8, 2013

Attention: Lana Cypret 2040 West Woodland Springfield, MO 65807-5912 Missouri Department of Natural Resources Division of Environmental Quality Southwest Regional Office

**Т**е: Permit Number MO-0053627 **Discharge Monitoring Report** 

Dear Mrs. Cypret:

new capture system was constructed without a discharge to Short Creek. 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the Enclosed is the NPDES Monitoring Report for the period of June 1, 2013, through June 30,

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- Clear and grade the channel, Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack.
- The above activities were completed in October 2012
- and cleared the access road to improve visibility in November 2012 The Trust retained RSI to make improvements to the access road from Melang Road

- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- duration and termination of the Access Agreement. The Residual Beneficiary, EPA, MDNR, and the Trustee met on May 7, 2013, to resolve the Interim Access Agreement property. The Trust Residual Beneficiary wanted to meet with EPA and MDNR to clarify duration and termination of the Access Agreement. The Residual Beneficiary, EPA, terms of a final Access Agreement during the next few months. issues. The parties agreed to enter into an Interim Access Agreement and negotiate the EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the The Trust and EPA negotiated the terms of an Interim Access Agreement to allow the
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

# The following activities were completed during June 2013 reporting period

- The terms and conditions of the Interim Access Agreement were finalized on June 12,
- On June 13, 2013, CBI issued April 2013 Monthly Leachate Sampling Report
- 2013 CBI, conducted monthly inspection, repairs and surface water sampling on June 26,
- The City started depositing lead and zinc impacted soils on the property
- On March 27, 2013, the Trust received a draft Missouri State Operating Permit for review and comment. The draft permit is a no discharge permit with provisions 16, 2013, MDNR made the draft permit available for public review implementation of a Storm Water Pollution Prevention Plan (SWPPP). On May for emergency sampling and compliance as well as preparation and

If you have questions concerning this report or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Alan Moreau, MDNR Mark Finney, CBI

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

July 5, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

30, 2006 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 2.48 inches. A wet test was ran during this time period Enclosed is the NPDES Monitoring Report for the period of June 1, 2006 through June

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

July 6, 2012

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the new capture system was constructed without a discharge to Short Creek. Enclosed is the NPDES Monitoring Report for the period of June 1, 2012, through June 30,

The following are the highlights of pertinent activities during June 2012

- The construction of Leachate Collection System was completed in April 2012.
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- Collection system is operating as designed. There were no samples collected or analyzed during this reporting period. The Leachate
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

If you have questions concerning the attached monitoring data or require additional information please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E. Trust Administrator

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR Mr. Don Vandyke Hazardous Waste Program Missouri Department of Natural Resources PO BOX 176 Jefferson City, MO 65102-0176



Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

July 8, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

discharge) was not detected. Rainfall for the period totaled 1.02 inches phosphate concentration at the Short Creek sampling station was 2.3 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period of June 1, 2011, through June 30, The

been impacted by recent channel clean out activities and other hydraulic anomalies near the spring. These issues should be resolved once the leachate collection system is in place. The result of Phosphate concentration at the Short Creek sampling station appears to have

The following are the highlights of pertinent activities during April 2011

system. Shaw E&I completed a site survey to finalize the design of the leachate collection

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

August 1, 2007

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

Rainfall for the period totaled 0.85 inches. 31, 2007 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period of July 1, 2007 through July

seepage from gypstack. We will continue the water treatment activities and decide on a March 2, 2007 letter. corrective course of action after we hear from you about our proposal(s) outlined in our As you know we are working with you on a short and long term plans for treating the

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

August 2, 2010

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report
Permit Number MO-0053627

Dear Mrs. Cypret:

Wastewater Treatment Plant discharge) was 0.19 mg/l. station was 0.78 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the the period totaled 8.00 inches. The phosphate concentration at the Short Creek sampling 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for Enclosed is the NPDES Monitoring Report for the period of July 1, 2010, through June 31,

The following are the highlights of pertinent activities during April 2010

on these proposals. Wet Land proposal. The Trust is currently waiting on MDNR for approval and directions proposed leachate collection system and the column tests for design of the Engineered toward the resolution of proposed remediation and future activities at the site. Mr. Van to get an internal MDNR meeting to finalize a decision on the design and construction of the Leachate Management System. On May 26, 2010, the representatives of MDNR, PCS, the Trust, Shaw, and CERTUS met at Joplin to recap the progress made to date On June 16, 2010, Per Mr. Van Dyke's request, Shaw resubmitted three copies of the Dyke indicated that he is planning an internal meeting to formulate a response to the Leachate Management Option letter. The Trust understands that Mr. Van Dyke is trying

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



Fax 913.451.2005

### SELS Administrative Services, L.L.C.

August 4, 2008

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

Enclosed is the NPDES Monitoring Report for the period of July 1, 2008 through July 31, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 4.86 inches.

In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated January 28, 2008 authorizing us to proceed with the plant relocation project. Shaw is currently working on the design and permitting. The Trust submitted it's NPDES renewal application on September 27, 2007. To date we have not received a response from MDNR regarding the status of our NPDES renewal.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I



Fax 913.451.2005

### SELS Administrative Services, L.L.C.

August 5, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

totaled 3.70 inches. for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period Enclosed is the NPDES Monitoring Report for the period of July 1, 2009, through July 31, 2009,

comprehensive and long term solution for this project. The Trust and MDNR will meet on August 6, 2009 to review alternatives and develop an action plan. On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In a letter dated initiate a Feasibility Study to evaluate long-term remediation options. In July MDNR directed the December 17, 2008, the Trust requested a 90-day extension to address the comments and also Trust to prepare for discussions surrounding the submitted documents in order to arrive at a

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

August 8, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Rainfall for the period totaled 2.12 inches. 31, 2005 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period of July 1, 2005 through July

Short Creek reducing the creak flow over the lower dam. This maintenance appears to In July we cleaned the lower dam intake piping and improved the capture rate from have remedied the excess phosphorous that were detected last month.

information, please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Bruce Martin
Cynthia Davis



11206 Thompson Avenue Fax: 913-317-2660 Lenexa, KS 913-317-2623 66219

August 19, 2013

Attention: Lana Cypret 2040 West Woodland Springfield, MO 65807-5912 Missouri Department of Natural Resources Division of Environmental Quality Southwest Regional Office

**Т**е: Permit Number MO-0053627 **Discharge Monitoring Report** 

Dear Mrs. Cypret:

new capture system was constructed without a discharge to Short Creek. Enclosed is the NPDES Monitoring Report for the period of July 1, 2013, through July 31, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- Clear and grade the channel, Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack.
- The above activities were completed in October 2012
- and cleared the access road to improve visibility in November 2012 The Trust retained RSI to make improvements to the access road from Melang Road

- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- property. The Trust Residual Beneficiary wanted to meet with EPA and MDNR to clarify duration and termination of the Access Agreement. The Residual Beneficiary, EPA, MDNR, and the Trustee met on May 7, 2013, to resolve the Interim Access Agreement terms of a final Access Agreement during the next few months. issues. The parties agreed to enter into an Interim Access Agreement and negotiate the EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the The Trust and EPA negotiated the terms of an Interim Access Agreement to allow the
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

## The following activities were completed during June 2013 reporting period

- On July 22, 2013, the Trust received the final Missouri State Operating Permit (SWPPP). preparation and implementation of a Storm Water Pollution Prevention Plan permit with provisions for emergency sampling and compliance as well as regulating the discharge from the gyp stack. The final Permit is a no discharge
- #2 to the discharge basin. Solicited a bid for the construction of a second force main extending from MH1W Pump
- Obtained quote for making repairs to system (removing sediment from MH1W vaults, fill and grading erosion channels on berm, grading creek crossing).
- On July 24, 2013, conducted the monthly site inspection and sampling

at 913-317-2623 If you have questions concerning this report or require additional information, please contact me

Sincerely

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Alan Moreau, MDNR Mark Finney, CBI

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

August 1, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

phosphate concentration at the Short Creek sampling station was 0.53 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was not detected. Rainfall for the period totaled 0.83 inches. 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The Enclosed is the NPDES Monitoring Report for the period of July 1, 2011, through July 31,

The following are the highlights of pertinent activities during April 2011.

- We received survey of soil borings and cross sections of south bank of Short
- Started on leachate collection system design

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

 $\frac{1}{2}$ Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

August 7, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

31, 2006 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 3.29 inches. Enclosed is the NPDES Monitoring Report for the period of July 1, 2006 through July

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

August 8, 2012

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists; the new capture system was constructed without a discharge to Short Creek. Enclosed is the NPDES Monitoring Report for the period of July 1, 2012, through July 31,

The following are the highlights of pertinent activities during June 2012

- The construction of Leachate Collection System was completed in April 2012.
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- Collection system is operating as designed. There were no samples collected or analyzed during this reporting period. The Leachate
- Until MDNR approves the Trust's request, we will submit this report without any data The Trust recommends terminating the DMR reports since there is no outfall to sample

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

September 2, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Missouri. Rainfall for the period totaled 3.89 inches. August 31, 2005 for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of August 1, 2005 through

Short Creek reducing the creak flow over the lower dam. This maintenance appears to In August we replaced the lower dam intake piping and improved the capture rate from have remedied the excess phosphorous that were detected last month.

information, please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Bruce Martin
Cynthia Davis



Fax 913.451.2005

### SELS Administrative Services, L.L.C.

September 3, 2008

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 west Woodland Springfield, MO 65807-5912 Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

period totaled 4.01 inches. Enclosed is the NPDES Monitoring Report for the period of August 1, 2008 through August 31, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the

In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated January 28, 2008 authorizing us to proceed with the plant relocation project. Shaw submitted the engineering report to MDNR on August 26, 2008. The Trust submitted it's NPDES renewal application on September 27, 2007. On August 7, 2008, MDNR and the Trust participated in a relocation project. We are currently waiting on the approval of the Engineering Report and the conference call to respond to MDNR questions with regard to the scope the permit and the plant permit application.

please contact me at 913-317-2623 If you have questions concerning the attached monitoring data or require additional information

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

September 8, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

period totaled 6.42 inches 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the Enclosed is the NPDES Monitoring Report for the period of August 1, 2009, through August 31,

On December 16, 2008, the Trust and MDNR discussed MDNR's comments on the permit application and Engineering report to relocate the waste water treatment plant. In a letter dated engineered landfill will be submitted later. comprehensive and long term solution for this project. The Trust and MDNR met on August 6, proposed containment system. The work plan for evaluation of discharge which consists of an August 27, 2009 to define the data gaps and plan for collecting the necessary data to design the Trust to prepare for discussions surrounding the submitted documents in order to arrive at a initiate a Feasibility Study to evaluate long-term remediation options. In July MDNR directed the December 17, 2008, the Trust requested a 90-day extension to address the comments and also 2009 to review alternatives and develop an action plan. The Trust submitted a work plan on

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

September 6, 2007

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

Missouri. Rainfall for the period totaled 5.31 inches. August 31, 2007 for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of August 1, 2007 through

corrective course of action after we hear from you about our proposal(s) outlined in our seepage from gypstack. We will continue the water treatment activities and decide on a implementation of future plans. 2007. We are working on responding to Mr. Stinson's letter and arrange for March 2, 2007 letter. We received a letter form Mr. Dennis Stinson Dated August 29, As you know we are working with you on a short and long term plans for treating the

information, please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



Fax 913.451.2005 913.317.2623

#### SELS Administrative Services, L.L.C.

September 9, 2010

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Attention: Lana Cypret Division of Environmental Quality

Permit Number MO-0053627 **Discharge Monitoring Report** 

Dear Mrs. Cypret:

#003, (the Wastewater Treatment Plant discharge) was 0.20 mg/l. sampling station was 0.60 milligram per liter (mg/l). The phosphate concentration at Outfall for the period totaled 0.84 inches. The phosphate concentration at the Short Creek 31, 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Enclosed is the NPDES Monitoring Report for the period of August 1, 2010, through August Rainfall

The following are the highlights of pertinent activities during August 2010.

- requirements of the US army Corp of Engineers. The representative of the US Army Corp of Engineers identified the need to submit the necessary Nation Wide Permit Application Creek. The purpose of the meeting was to ensure the improvement plans will meet the August 27, 2010. before initiating construction. Shaw submitted the Nation Wide Permit Application on Engineers met at the site to review and discuss the proposed improvement plans for Short On August 9, 2010, the representatives of Trust, Shaw, MDNR, and US Army Corp of
- Trust sent an e-mail clarifying its request confirming the August 12, 2010 letter incorrectly requests for the withdrawal of the "NPDES Permit Application". The intent of the On August 12, 2010, the Trust submitted a letter, following conversations with Mr. Vandyke, requesting withdrawal of its **NPDES Permit Application**. Later on August 19, 2010, the August 12, 2010 letter was to withdraw the "Construction Permit Application"

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



11206 Thompson Avenue Fax: 913-317-2660 Lenexa, KS 913-317-2623 66219

September 10, 2013

Attention: Lana Cypret 2040 West Woodland Springfield, MO 65807-5912 Missouri Department of Natural Resources Division of Environmental Quality Southwest Regional Office

Permit Number MO-0053627 **Discharge Monitoring Report** 

Dear Mrs. Cypret:

the new capture system was constructed without a discharge to Short Creek. 31, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists Enclosed is the NPDES Monitoring Report for the period of August 1, 2013, through August

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- Clear and grade the channel, Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack.
- The above activities were completed in October 2012
- and cleared the access road to improve visibility in November 2012 The Trust retained RSI to make improvements to the access road from Melang Road

- Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the property. The Trust Residual Beneficiary wanted to meet with EPA and MDNR to clarify duration and termination of the Access Agreement. The Residual Beneficiary, EPA, MDNR, and the Trustee met on May 7, 2013, to resolve the Interim Access Agreement terms of a final Access Agreement during the next few months. issues. The parties agreed to enter into an Interim Access Agreement and negotiate the The Trust and EPA negotiated the terms of an Interim Access Agreement to allow the
- preparation and implementation of a Storm Water Pollution Prevention Plan permit with provisions for emergency sampling and compliance as well as regulating the discharge from the gyp stack. The final Permit is a no discharge On July 22, 2013, the Trust received the final Missouri State Operating Permit (SWPPP).

# The following activities were completed during August 2013 reporting period

- #2 to the discharge basin. Awarded a bid for the construction of a second force main extending from MH1W Pump
- from MH1W vaults, fill and grading erosion channels on berm, grading creek crossing). Obtained quote and awarded work for making repairs to system (removing sediment
- July to MDNR August 26, 2013, submitted the monthly inspection reports for May, June, and
- On August 27, 2013, conducted the monthly site inspection and sampling

at 913-317-2623 If you have questions concerning this report or require additional information, please contact me

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Alan Moreau, MDNR Mark Finney, CBI

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

September 5, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

Missouri. Rainfall for the period totaled 2.46 inches August 31, 2006 for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of August 1, 2006 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

September 6, 2012

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Attention: Lana Cypret

Permit Number MO-0053627 Discharge Monitoring Report

Dear Mrs. Cypret:

the new capture system was constructed without a discharge to Short Creek. 31, 2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer exists: Enclosed is the NPDES Monitoring Report for the period of August 1, 2012, through August

The following are the highlights of pertinent activities during August 2012

- The construction of Leachate Collection System was completed in April 2012.
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- Collection system is operating as designed. There were no samples collected or analyzed during this reporting period. The Leachate
- Until MDNR approves the Trust's request, we will submit this report without any data The Trust recommends terminating the DMR reports since there is no outfall to sample

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely

SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E FI Missouri Remediation Trust Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176 Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102-0176

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Sieu Dangt



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

September 8, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

phosphate concentration at the Short Creek sampling station was 0.48 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was not detected. Rainfall for the period totaled 2.37 inches. 31, 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The Enclosed is the NPDES Monitoring Report for the period of August 1, 2011, through August

The following are the highlights of pertinent activities during April 2011.

approval A draft leachate collection system design was submitted to MDNR for review and

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

September 8, 2011 Page 2

C C C Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

October 3, 2008

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Attention: Tina White

Re: Discharge Monitoring Report
Permit Number MO-0053627

Dear Mrs. White:

Rainfall for the period totaled 7.92 inches. Enclosed is the NPDES Monitoring Report for the period of September 1, 2008 through September 30, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri.

In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated January 28, 2008 authorizing us to proceed with the plant relocation project. Shaw submitted the engineering report to MDNR on August 26, 2008. The Trust submitted it's NPDES renewal application on September 27, 2007. On August 7, 2008, MDNR and the Trust participated in a relocation project. We are currently waiting on the approval of the Engineering Report and the conference call to respond to MDNR questions with regard to the scope the permit and the plant permit application.

please contact me at 913-317-2623 If you have questions concerning the attached monitoring data or require additional information

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.451.1224 Fax 913.451.2005

October 4, 2004

Division of Environmental Quality
Southwest Regional Office
Missouri department of natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Missouri. Rainfall for the period totaled 0.74 inches Enclosed is the NPDES Monitoring Report for the period September 1, 2004 through September 30, 2004 for the Former Farmland Industries Gypstack Property at Joplin,

information, please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

October 4, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

September 30, 2006 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.16 inches. Enclosed is the NPDES Monitoring Report for the period of September 1, 2006 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



Fax 913.451.2005

#### SELS Administrative Services, L.L.C.

October 4, 2011

Attention: Lana Cypret Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Re: Permit Number MO-0053627 Discharge Monitoring Report

Dear Mrs. Cypret:

Missouri. The phosphate concentration at the Short Creek sampling station was 0.28 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Enclosed is the NPDES Monitoring Report for the period of September 1, 2011, through September 30, 2011, for the former Farmland Industries Gypstack Property at Joplin, Treatment Plant discharge) was not detected. Rainfall for the period totaled 3.93 inches

The following are the highlights of pertinent activities during April 2011.

2011 for review and approval. A draft leachate collection system design was submitted to MDNR in August

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

Kamyar Manesh, P.E. SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Trust Administrator

 $\frac{1}{2}$ Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

October 5, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Missouri. Rainfall for the period totaled 3.89 inches September 1, 2005 for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of September 1, 2005 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Bruce Martin
Cynthia Davis



Fax 913.451.2005

### SELS Administrative Services, L.L.C

October 6, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report
Permit Number MO-0053627

Dear Mrs. Cypret:

Enclosed is the NPDES Monitoring Report for the period of September 1, 2009, through September 30, 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. rain fall during the past two months) have exasperated the compliance condition. PCS is in the during the sever storms and excessive infiltration from the stack (approximately 13 inches of sampling station exceeded the 1.0 parts per million. We believe the damaged by-pass intake process of repairing the by pass intake. Rainfall for the period totaled 6.31 inches. The Phosphate concentration at the Short Creek

proceed. On September 15, 2009 a revised work plan was submitted and followed by data collection on September 24, 2009. A total of 12 soil borings were installed, four borings along containment system. On September 11, 2009 state provided comments and authorization to to define the data gaps and plan for collecting the necessary data to design the proposed alternatives and develop an action plan. submitted later. The borings were logged and depth to bedrock was identified to assist with the final design. the southern extent of the two drain and eight along the centerline of the proposed slurry wall. leachate from the gyp stack. The Trust and MDNR met on August 6, 2009 to review The work plan for evaluation of discharge which consists of an engineered landfill will be The Trust submitted a feasibility study to address the long term containment and treatment of The Trust submitted a work plan on August 27, 2009

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

October 7, 2010

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Attention: Lana Cypret Division of Environmental Quality

Permit Number MO-0053627 **Discharge Monitoring Report** 

Dear Mrs. Cypret:

Missouri. Rainfall for the period totaled 6.83 inches. The phosphate concentration at the Short Creek sampling station was 0..87 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was 0.11mg/l September 30, 2010, for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of September 1, 2010, through

The following are the highlights of pertinent activities during August 2010.

- On September 10, 2010, we notified Mr. Van Dyke that, the US Army Corp of Engineers August 27, 2010. (USACE) has received the Nation Wide Permit Application submitted to them on
- On September 20, 2010, The Trust received the Nation Wide permit from USACE and forwarded a copy to MDNR
- Management System Design Evaluation. On September 23, received MDNR interval review "Review of Leachate
- to comply with the requirements and conditions of the USACE We are currently waiting to receive a Waiver from MDNR. The Waiver is needed permit
- We are also waiting on clarification of scope of our next design submittal to

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E. Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



11206 Thompson Avenue Lenexa, KS 66219 913-317-2623 Fax: 913-317-2660

October 9, 2013

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

Creek. On July 22, 2013, the Trust received the final Missouri State Operating Permit regulating the discharge from the gyp stack. The final Permit is a no discharge permit no longer exists. The new capture system was constructed without a discharge to Short September 30, 2013, for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of September 1, 2013, through There are no sampling and results available for this reporting period. Outfall 003

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- form C (Application for Discharge Permit). (Application for Construction or Operating Permit Under Missouri Clean Water Law) and On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A
- In October 2012 the Trust completed the following:
- Removed the east pond dam restoring the natural flow of the Short Creek,
- . Abandon the Short Creek by-pass,
- Removed the existing crossing and replace it with a rock low water crossing,
- Cleared and graded the channel,
- Removed the former waste water treatment plant inlet structure, and
- Installed a French Drain system along the west toe of the gypsum stack.
- The Trust also made improvements to the access road from Melang Road and cleared the access road to improve visibility in November 2012.

- 7, 2012 The Trust submitted a sampling plan for the Leachate Collection System on November
- duration and termination of the Access Agreement. The Residual Beneficiary, EPA, MDNR, and the Trustee met on May 7, 2013, to resolve the Interim Access Agreement terms of a final Access Agreement during the next few months. issues. The parties agreed to enter into an Interim Access Agreement and negotiate the EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the property. The Trust Residual Beneficiary wanted to meet with EPA and MDNR to clarify The Trust and EPA negotiated the terms of an Interim Access Agreement to allow the
- the discharge from the gyp stack. The final Permit is a no discharge permit with provisions for emergency sampling and compliance as well as preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). On July 22, 2013, the Trust received the final Missouri State Operating Permit regulating

## The following activities were completed during September 2013 reporting period

- On September 30, 2013, CB&I mobilized to the site to commence work on construction of a second force main extending from MH1W Pump #2 to the discharge basin.
- vaults, fill and grading erosion channels on berm, grading creek crossing). CB&I also began work on making repairs to system (removing sediment from MH1W
- On September 23, 2013, submitted the monthly inspection reports for August 2013 to
- On September 24, 2013, conducted the monthly site inspection and sampling

If you have questions concerning this report or require additional information, please contact me at 913-317-2623

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Alan Moreau, MDNR Mark Finney, CBI

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

October 9, 2012

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

September 30, 2012, for the former Farmland Industries Gypstack Property at Joplin, no longer exists; the new capture system was constructed without a discharge to Short Missouri. There are no sampling and results available for this reporting period. Outfall 003 Enclosed is the NPDES Monitoring Report for the period of September 1, 2012, through

The following are the highlights of pertinent activities during September 2012

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- ယ Remove the existing crossing and replace it with a rock low water crossing,
- Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- Collection system is operating as designed. There were no samples collected or analyzed during this reporting period. The Leachate
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

October 9, 2012 Page 3

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176 Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176 Jefferson City, MO 65102-0176

Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102-0176

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Sieu Dangt



Fax 913.451.2005

#### SELS Administrative Services, L.L.C.

November 3, 2008

Springfield, MO 65807-5912 Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality 2040 west Woodland

Attention: Tina White

Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

the period totaled 2.90 inches. Enclosed is the NPDES Monitoring Report for the period of October 1, 2008 through October 31, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for

In response to our November 30, 2007 letter, we received a letter from Mr. Van Dyke dated January 28, 2008 authorizing us to proceed with the plant relocation project. Shaw submitted the engineering report to MDNR on August 26, 2008. The Trust submitted it's NPDES renewal application on September 27, 2007. On August 7, 2008, MDNR and the Trust participated in a relocation project. We are currently waiting on the approval of the Engineering Report and the conference call to respond to MDNR questions with regard to the scope the permit and the plant permit application.

please contact me at 913-317-2623 If you have questions concerning the attached monitoring data or require additional information

Kamyar Manesh, P.E. SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Trust Administrator

 $\frac{1}{2}$ Mark Finney, Shaw E&I Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.451.1224 Fax 913.451.2005

November 4, 2004

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

October 31, 2004 for the Former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 5.24 inches. Enclosed is the NPDES Monitoring Report for the period October 1, 2004 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 Fax 913.451.2005 913.317.2623

November 5, 2005

Springfield, MO 65807-5912 2040 west Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Missouri. Rainfall for the period totaled 2.17 inches. October 31, 2005 for the former Farmland Industries Gypstack Property at Joplin, Enclosed is the NPDES Monitoring Report for the period of October 1, 2005 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Kamyar Manesh, P.E.

Trust Administrator

CC: Cynthia Davis **Bruce Martin** 



Fax 913.451.2005 913.317.2623

#### SELS Administrative Services, L.L.C.

November 5, 2010

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Attention: Lana Cypret

Dear Mrs. Cypret:

Permit Number MO-0053627 **Discharge Monitoring Report** 

#003, (the Wastewater Treatment Plant discharge) was 0.21mg/l. sampling station was 0.71 milligram per liter (mg/l). The phosphate concentration at Outfall October 31, 2010, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.21 inches. The phosphate concentration at the Short Creek Enclosed is the NPDES Monitoring Report for the period of October 1, 2010, through

The following are the highlights of pertinent activities during August 2010.

- proposed leachate collection system. certification along with US Army Corps of Engineers Nationwide Permit, obtained in September 2010, will resolve all permitting requirements to construct the On October 22, 2010, MDNR issued the 401 Water Quality Certification. This
- On October 29, 2010, we received MDNR's authorization to proceed with a modified design of Option 4 from the "Leachate Management System Design Evaluation" report dated April 4, 2010.
- 401 Water Quality Certification. the project will be administered through US Army Corps Nationwide Permit and upon between the Trust and MDNR since the future permitting requirements for treatment plant. The withdrawal of the construction permit was mutually agreed withdrawal of the Construction Permit for relocation of the existing waste water The Trust received a letter from MDNR, date October 25, 2010, confirming the

October 7, 2010 Page 2

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS
Michael Brom, PCS



11206 Thompson Avenue Fax: 913-317-2660 Lenexa, KS 913-317-2623 66219

November 7, 2013

Attention: Lana Cypret 2040 West Woodland Springfield, MO 65807-5912 Missouri Department of Natural Resources Division of Environmental Quality Southwest Regional Office

Permit Number MO-0053627/No Discharge Permit Discharge Monitoring Report

Dear Mrs. Cypret:

discharge from the gyp stack. The final Permit is a no discharge permit July 22, 2013, the Trust received the final Missouri State Operating Permit regulating the exists. The new capture system was constructed without a discharge to Short Creek. On Enclosed is the NPDES Monitoring Report for the period of October 1, 2013, through October 31, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer

# The following are the highlights of pertinent activities prior to this reporting period.

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- form C (Application for Discharge Permit). (Application for Construction or Operating Permit Under Missouri Clean Water Law) and On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A
- In October 2012 the Trust completed the following:
- Removed the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Removed the existing crossing and replace it with a rock low water crossing,
- Cleared and graded the channel, Removed the former waste water treatment plant inlet structure, and
- Installed a French Drain system along the west toe of the gypsum stack.
- The Trust also made improvements to the access road from Melang Road and cleared the access road to improve visibility in November 2012.

- 7, 2012 The Trust submitted a sampling plan for the Leachate Collection System on November
- EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the property. The Trust Residual Beneficiary wanted to meet with EPA and MDNR to clarify duration and termination of the Access Agreement. The Residual Beneficiary, EPA, MDNR, and the Trustee met on May 7, 2013, to resolve the Interim Access Agreement terms of a final Access Agreement during the next few months. issues. The parties agreed to enter into an Interim Access Agreement and negotiate the The Trust and EPA negotiated the terms of an Interim Access Agreement to allow the
- the discharge from the gyp stack. The final Permit is a no discharge permit with provisions for emergency sampling and compliance as well as preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). On July 22, 2013, the Trust received the final Missouri State Operating Permit regulating

## The following activities were completed during October 2013 reporting period

- Pump #2 to the discharge basin. CB&I completed work on construction of a second force main extending from MH1W
- vaults, fill and grading erosion channels on berm, grading creek crossing). CB&I completed work on making repairs to system (removing sediment from MH1W
- On October 16, 2013, conducted the monthly site inspection and sampling.
- CB&I prepared a draft Storm Water Pollution Prevention Plan (SWPPP).
- Solicited bids for conducting property boundary survey along south property line
- Solicited bids for constructing a security fence along south property line
- Solicited information from drillers to abandon monitoring wells

at 913-317-2623. If you have questions concerning this report or require additional information, please contact me

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Alan Moreau, MDNR Mark Finney, CBI

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang



Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

November 7, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

October 31, 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The phosphate concentration at the Short Creek sampling station was 0.64 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was 0.1 mg/l. Rainfall for the period totaled 0.67 inches. Enclosed is the NPDES Monitoring Report for the period of October 1, 2011, through

The following are the highlights of pertinent activities during October 2011.

MDNR is reviewing the design documents for the leachate collection system.

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

November 7, 2011 Page 2

C C C Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

November 7, 2012

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

exists; the new capture system was constructed without a discharge to Short Creek. October 31, 2012, for the former Farmland Industries Gypstack Property at Joplin, Missouri There are no sampling and results available for this reporting period. Outfall 003 no longer Enclosed is the NPDES Monitoring Report for the period of October 1, 2012, through

The following are the highlights of pertinent activities during October 2012

- The construction of Leachate Collection System was completed in April 2012.
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- .. Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- 4. Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- The above activities were completed in October 2012.
- Collection system is operating as designed. There were no samples collected or analyzed during this reporting period. The Leachate
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

November 7, 2012 Page 3

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176 Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102-0176

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Sieu Dangt



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

November 9, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

gypstack flows over the dam structure without being captured. Higher than normal creek levels caused by almost 9 inch of rain fall this month and 13 inches of rain fall in September have made the containment system ineffective. PCS is also in the process of repairing the damaged 31, 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 8.88 inches. The Phosphate concentration at the Short Creek sampling station slightly exceeded the 1.0 parts per million. We believe the containment system effectiveness is compromised by the significant rain fall events. Noticeable seepage from the by-pass intake. Enclosed is the NPDES Monitoring Report for the period of October 1, 2009, through October

proceed. On September 15, 2009 a revised work plan was submitted and followed by data collection on September 24, 2009. A total of 12 soil borings were installed, four borings along containment system. On September 11, 2009 state provided comments and authorization to to define the data gaps and plan for collecting the necessary data to design the proposed alternatives and develop an action plan. leachate from the gyp stack. The Trust and MDNR met on August 6, 2009 to review of discharge which consists of an engineered landfill will be submitted later. The borings were logged and depth to bedrock was identified to assist with the final design. The borings were also surveyed in October to facilitate the design. The work plan for evaluation the southern extent of the two drains, and eight along the centerline of the proposed slurry wall. The Trust submitted a feasibility study to address the long term containment and treatment of The Trust submitted a work plan on August 27, 2009

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.

12/27/2013
Page 2
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I
Doug Engel, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

November 14, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

October 31, 2006 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.62 inches. Enclosed is the NPDES Monitoring Report for the period of October 1, 2006 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

December 4, 2006

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Tina White

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. White:

November 30, 2006 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 3.64 inches. Enclosed is the NPDES Monitoring Report for the period of November 1, 2006 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Cynthia Davies



#### SELS Administrative Services,

11206 Thompson Ave Lenexa, KS 66219 Fax 913.451.2005 913.317.2623

December 5, 2008

Springfield, MO 65807-5912 Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality 2040 west Woodland

Attention: Tina White

Dear Mrs. White:

Re: Permit Number MO-0053627 Discharge Monitoring Report

Rainfall for the period totaled 1.39 inches. Enclosed is the NPDES Monitoring Report for the period of November 1, 2008 through November 30, 2008 for the former Farmland Industries Gypstack Property at Joplin, Missouri.

on our discussions with PCS, it appears that the intake by pass pipe is blocked by a beaver dam and very little flow is by passing the system resulting in water going over the low water dam. A professional trapper has been contacted to trap the beavers and remove the dam. The Phosphorus concentration at Short Creek sampling point was 1.7 milligram per liter. Based

construction/relocation of the waste water treatment plant. The Trust is working on preparing a On November 21, 2008, the Trust received MDNR's comments on its original application for response to the comments.

please contact me at 913-317-2623. If you have questions concerning the attached monitoring data or require additional information,

SELS Administrative Services, LLC, as Trustee Trust Administrator FI Missouri Remediation Trust Kamyar Manesh, P.E.

 $\frac{1}{2}$ Mark Finney, Shaw E&I Doug Engel, PCS Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office



Fax 913.451.2005

#### SELS Administrative Services, L.L.C.

December 6, 2010

Springfield, MO 65807-5912 2040 West Woodland Missouri Department of Natural Resources Southwest Regional Office Division of Environmental Quality

Attention: Lana Cypret

Dear Mrs. Cypret:

Permit Number MO-0053627 Discharge Monitoring Report

Missouri. The phosphate concentration at the Short Creek sampling station was 0.50 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Enclosed is the NPDES Monitoring Report for the period of November 1, 2010, through November 30, 2010, for the former Farmland Industries Gypstack Property at Joplin, Treatment Plant discharge) was 0.30mg/l. Rainfall for the period totaled 4.43 inches

The following are the highlights of pertinent activities during November 2010

- On November 4, 2010, the Trust received confirmation of its payment for the "401 Water Quality Certification".
- proposed project site and activities. On November 16, 2010, MDNR (Don Van Dyke, Kevin Hess, Gregory Perkins, and Leasue Meyers), Trust, and Shaw E&I representatives met at the site to inspect the
- system. the design and construction of channel improvements and the leachate collection for cleanup of waste. Quality Certification to accompany the Army Corp of Engineers Nation Wide Permit 38 In a letter dated November 23, 2010, MDNR provided the certification, and waivers to certain conditions pursuant to the Trust's request for Clean Water Act Section 401 Water The certification and waivers will allow the Trust to proceed with

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS
Michael Brom, PCS



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.451.1224 Fax 913.451.2005

December 7, 2004

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

November 30, 2004 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 6.56 inches. Enclosed is the NPDES Monitoring Report for the period November 1, 2004 through

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust SELS Administrative Services, LLC, as Trustee Kamyar Manesh, P.E.
Trust Administrator



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

December 8, 2009

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

Enclosed is the NPDES Monitoring Report for the period of November 1, 2009, through November 31, 2009, for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 0.61 inches. The Phosphate concentration at the Short Creek gypstack flows over the dam structure without being captured. sampling station slightly exceeded the 1.0 parts per million. Noticeable seepage from the

comments and authorization to proceed. On September 15, 2009 a revised work plan was submitted and followed by data collection on September 24, 2009. A total of 12 soil system design report. evaluation process. Shaw is currently working on the hydraulic containment retain Naturally Wallace, LLC (wetland company) to assist in design and boring and survey data with MDNR and worked on administrative procedures to depth to bedrock was identified to assist with the final design. Shaw reviewed soil borings were installed, four borings along the southern extent of the two drains, and eight along the centerline of the proposed slurry wall. The borings were logged and design the proposed containment system. On September 11, 2009 state provided August 27, 2009 to define the data gaps and plan for collecting the necessary data to to review alternatives and develop an action plan. The Trust submitted a feasibility study to address the long term containment and treatment of leachate from the gyp stack. The Trust and MDNR met on August 6, 2009 The Trust submitted a work plan on

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Megan Hart, MDNR, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

December 8, 2011

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

Enclosed is the NPDES Monitoring Report for the period of November 1, 2011, through November 30, 2011, for the former Farmland Industries Gypstack Property at Joplin, Missouri. The phosphate concentration at the Short Creek sampling station was 0.24 milligram per liter (mg/l). The phosphate concentration at Outfall #003, (the Wastewater Treatment Plant discharge) was 0.10 mg/l. Rainfall for the period totaled 5.62 inches

The following are the highlights of pertinent activities during November 2011.

City to review the proposed design for the leachate collection system. MDNR approved the design and authorized the Trust to proceed with preparing specification and bid On November 3, 2011, the Trust, Shaw, and MDNR representatives met in Jefferson package and obtain bids for construction.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Doug Engel, PCS Michael Brom, PCS



11206 Thompson Ave Lenexa, KS 66219 913.317.2623 Fax 913.451.2005

December 10, 2012

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Mrs. Cypret:

Enclosed is the NPDES Monitoring Report for the period of November 1, 2012, through November 30, 2012, for the former Farmland Industries Gypstack Property at Joplin, no longer exists; the new capture system was constructed without a discharge to Short Missouri. There are no sampling and results available for this reporting period. Outfall 003

The following are the highlights of pertinent activities prior to this reporting period

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists. The operation of Waste Water Treatment system was terminated on March 1, 2012
- (Application for Construction or Operating Permit Under Missouri Clean Water Law) and form C (Application for Discharge Permit). The Trust is waiting for response on status of On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A Form A and Form C.
- In September 2012 the Trust awarded a contract to RSI
- to remove the east pond dam restoring the natural flow of the Short Creek,
- Abandon the Short Creek by-pass,
- Remove the existing crossing and replace it with a rock low water crossing,
- Clear and grade the channel,
- Remove the former waste water treatment plant inlet structure, and
- Install a French Drain system along the west toe of the gypsum stack
- The above activities were completed in October 2012.

The following activities were completed during November 2012 reporting period

and cleared the access road to improve visibility in November 2012 The Trust retained RSI to make improvements to the access road from Melang Road

.

- November 15, 2012. Shaw completed the service and maintenance of the Leachate Collection System on
- 2012. Shaw submitted a sampling plan for the Leachate Collection System on November 7,
- of use of the stack for storage of lead and zinc impacted soils in November 2012. The Trust prepared and submitted a draft Access Agreement for use by the City of Joplin, Jasper County, and U.S. Environmental Protection Agency (EPA) in anticipation
- Collection system is operating as designed. There were no samples collected or analyzed during this reporting period. The Leachate
- Until MDNR approves the Trust's request, we will submit this report without any data. The Trust recommends terminating the DMR reports since there is no outfall to sample

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

Kamyar Manesh, P.E.
Trust Administrator
FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee

CC: Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief Sieu Dang, Southwest Regional Office Mark Finney, Shaw E&I Leasue Meyers, MDNR

December 10, 2012 Page 3

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176 Jefferson City, MO 65102-0176

Leasue Meyers, Environmental Engineer
Water Protection Program, Engineering Section
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102-0176

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Sieu Dangt



4400 College Boulevard, Suite 350 Overland Park, KS 66211-2326 913.317.2623 Fax 913.451.2005

December 14, 2005

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 west Woodland
Springfield, MO 65807-5912

Re: Discharge Monitoring Report Permit Number MO-0053627

Dear Sires;

Enclosed is the NPDES Monitoring Report for the period of November 1, 2005 through November 30, 2005 for the former Farmland Industries Gypstack Property at Joplin, Missouri. Rainfall for the period totaled 1.06 inches.

If you have questions concerning the attached monitoring data or require additional information, please contact me at 913-317-2623.

Sincerely,

FI Missouri Remediation Trust
SELS Administrative Services, LLC, as Trustee
Kamyar Manesh, P.E.
Trust Administrator

CC: Bruce Martin
Cynthia Davis



11206 Thompson Avenue Lenexa, KS 66219 913-317-2623 Fax: 913-317-2660

December 13, 2013

Division of Environmental Quality
Southwest Regional Office
Missouri Department of Natural Resources
2040 West Woodland
Springfield, MO 65807-5912
Attention: Lana Cypret

Re: Discharge Monitoring Report
Permit Number MO-0053627/**No Discharge Permit** 

Dear Mrs. Cypret:

discharge from the gyp stack. The final Permit is a no discharge permit July 22, 2013, the Trust received the final Missouri State Operating Permit regulating the exists. The new capture system was constructed without a discharge to Short Creek. On Enclosed is the NPDES Monitoring Report for the period of November 1, 2013, through October 30, 2013, for the former Farmland Industries Gypstack Property at Joplin, Missouri. There are no sampling and results available for this reporting period. Outfall 003 no longer

## The following are the highlights of pertinent activities prior to this reporting period.

- The construction of Leachate Collection System was completed in April 2012
- Outfall 003 no longer exists The operation of Waste Water Treatment system was terminated on March 1, 2012
- form C (Application for Discharge Permit). (Application for Construction or Operating Permit Under Missouri Clean Water Law) and On April 25, 2012, per MDNR's instruction, the Trust completed and submitted Form A
- In October 2012 the Trust completed the following:
- Removed the east pond dam restoring the natural flow of the Short Creek,
- . Abandon the Short Creek by-pass,
- Removed the existing crossing and replace it with a rock low water crossing,
- Cleared and graded the channel,
- Removed the former waste water treatment plant inlet structure, and
- Installed a French Drain system along the west toe of the gypsum stack.
- The Trust also made improvements to the access road from Melang Road and cleared the access road to improve visibility in November 2012.

- 7, 2012. The Trust submitted a sampling plan for the Leachate Collection System on November
- duration and termination of the Access Agreement. The Residual Beneficiary, EPA, MDNR, and the Trustee met on May 7, 2013, to resolve the Interim Access Agreement EPA, City of Joplin, and Jasper County to dispose lead and zinc impacted soils at the property. The Trust Residual Beneficiary wanted to meet with EPA and MDNR to clarify duration and termination of the Access Agreement. The Residual Beneficiary, EPA, terms of a final Access Agreement during the next few months. issues. The parties agreed to enter into an Interim Access Agreement and negotiate the The Trust and EPA negotiated the terms of an Interim Access Agreement to allow the
- the discharge from the gyp stack. The final Permit is a no discharge permit with provisions for emergency sampling and compliance as well as preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). On July 22, 2013, the Trust received the final Missouri State Operating Permit regulating

## The following activities were completed during October 2013 reporting period

- On November 19, 2013, conducted the November 2013 Site Inspection and Sampling. On November 18, 2013, submitted the October 2013 Inspection Report.
- Finalized the PO for KVE to conduct the survey of the south property line

at 913-317-2623. If you have questions concerning this report or require additional information, please contact me

Sincerely,

SELS Administrative Services, LLC, as Trustee FI Missouri Remediation Trust Kamyar Manesh, P.E. Trust Administrator

 $\frac{1}{2}$ Mark Finney, CBI Alan Moreau, MDNR Sieu Dang, Southwest Regional Office Donald Van Dyke, MDNR, Hazardous Waste Program Kevin Hess, MDNR, Water Pollution Section Chief

Donald Van Dyke, Hazardous Waste Program Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Kevin Hess, Water Pollution Section Chief Missouri Department of Natural Resources PO Box 176
Jefferson City, MO 65102-0176

Allen Moreau, Environmental Specialist Water Protection Program, Engineering Section Missouri Department of Natural Resources PO Box 176

Jefferson City, MO 65102-0176

Division of Environmental Quality Southwest Regional Office Missouri Department of Natural Resources 2040 West Woodland Springfield, MO 65807-5912 Attention: Sieu Dang

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES	NATHRAL RE	STROFTS				
NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH	L QUALITY	MUNICIPAL WA	STEWAT	ER DISCHARGES	ĊĠ	
FACILITY NAME		PERMIT NUMBER	COUNTY	OWNER		TYPE OF FACILITY
FARMLAND INDUSTRIES JOPLIN PLANT		MO-0053627	JASPER	FARMLAND INDU	FARMLAND INDUSTRIES INC., K.C., MO	FERTILIZER MFG.
REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PERIOD April 1 through April 30, 2004	ERIOD April 30, 2004	
DATE SAMPLED	4/6/2004					
TIME OF DAY SAMPLED	7:20					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	4/7/2004					
PARAMETERS	PERMITTED FINAL LIMITS	ACTUAL RESULTS OF ANALYSIS	SAMPLE TYPE	ANALYTICAL METHOD	REMARKS AND COMMENTS	NTS
FLOW MGD	NONE	18	ъ	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	NONE	10.0	മ	EPA 160.2		
pH Units	6.0 - 9.0	7.53	Ø	EPA 150.1		
TEMPERATURE °F	NONE	58	മ	EPA 170.1		
FLUORIDE mg/l	8.00	0.87	മ	EPA 300.0		
PHOSPHORUS mg/l	1.00	1.16	മ	EPA 365.4	retest on 4/26/04 1.31	
NO <sub>3</sub> - N mg/l	NONE	1.39	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	3.17	Ø	EPA 350.1		
SULFATES mg/l	NONE	109	മ	EPA 300.0		
ANALYSES PERFORMED BY			SIGNATURE OF ANALYST	VALYST		
Pace Analytical						1
תפרטת - אדרתטיפט סד טייאופת						EX.

DINDUSTRIES JOPLIN PLANT  QUENCY OF MONITORING  ### ONCE/MONTH GR  ###################################	NISSOURI DEPARTMENT OF NATURAL RESOURCES  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES	T FOR NON-N	MUNICIPAL WA	STEWAT	ER DISCHARGE	(A)	
AMPLED	FACIUTY NAME FARMLAND INDUSTRIES JOPLIN PLANT		PERMIT NUMBER MO-0053627	COUNTY	OWNER FARMLAND INDU	STRIES INC., K.C., MO	TYPE OF FACILITY FERTILIZER MFG.
AMPLED  AMPLED  AMPLED  BOAY SAMPLED  BOAY SAMPLED  COLLECTED BY  SCOLLECTED BY  COLLECTED BY  COLLE	REQUIRED FREQUENCY OF MONITORING  OUTFALL #003	ONCE/MONTH GR	AB		THIS REPORT COVERS P	ERIOD h April 30, 2004	
PANY SAMPLED   6.25	DATE SAMPLED	4/6/2004					
OF ANALYSES         47/2004         ACTUAL RESULTS         SAMPLE         ANALYTICAL         REMARKS AND COMMEN         PRACTION REMARKS AND COMMEN         ANALYTICAL         REMARKS AND COMMEN         ANALYTICAL         REMARKS AND COMMEN         ANALYTICAL         REMARKS AND COMMEN         ANALYTICAL         REMARKS AND COMMEN         AND COMM	SAMPLES COLLECTED BY	6:35 PCS					
PARAMETERS   PERMITTED   ACTUAL RESULTS   SAMPLE   ANALYTICAL   REMARKS AND COMMEN   MGD   NONE   0.18   TYPE   MEHOD	DATES OF ANALYSES	4/7/2004					
PARAMETERS		PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
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SUSPENDED SOLIDS mg/l 50 10.0 a EPA 160.2  Units 6.0:9.0 6.50 a EPA 150.1  RATURE "F NONE 58 a EPA 170.1  DE mg/l 8.00 2.7 a EPA 300.0  mg/l NONE 3.8 a EPA 300.0  ES mg/l NONE 7.1 a EPA 300.0  ES mg/l NONE 7.1 a EPA 300.0  FERTORNED BY  Page Analytical  SOUNTINE OF ANALYST  MINITED STORMED STO		NONE	0.18	ь	ESTIMATE		
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RATURE 9F NONE 58 a EPA 170.1  DE mg/l 8.00 2.7 a EPA 300.0  HORUS mg/l NONE 3.8 a EPA 300.0  mg/l NONE 27.4 a EPA 300.0  TES mg/l NONE 72.1 a EPA 300.0  ES mg/l NONE 72.1 a EPA 300.0  PERFORMED BY OF ANALYST  PAGO A PROVIDE BY OWNER PAGO A PROVIDE OF ANALYST		6.0 - 9.0	6.50	Ø	EPA 150.1		
DE         mg/l         8.00         2.7         a         EPA 300.0           HORUS         mg/l         1         0.455         a         EPA 365.4         EPA 365.4           mg/l         NONE         3.8         a         EPA 300.0         EPA 300.0           ES         mg/l         NONE         721         a         EPA 300.0           ES         mg/l         NONE         721         a         EPA 300.0           EPA 300.0         EPA 300.0         EPA 300.0         EPA 300.0		NONE	58	മ	EPA 170.1		
HORUS mg/l 1 0.455 a EPA 305.4  mg/l NONE 27.4 a EPA 300.0  ES mg/l NONE 721 a EPA 300.0  EPA 300.0		8.00	2.7	a	EPA 300.0		
NONE   3.8   A   EPA 300.0		_	0.455	Ø	EPA 365.4		
NONE   27.4   a   EPA 350.1		NONE	3.8	a	EPA 300.0		
mg/l NONE 721 a EPA 300.0		NONE	27.4	Ø	EPA 350.1		
Pace Analytical  SIGNATURE OF ANALYST  SIGNATURE OF ANALYST		NONE	721	מ	EPA 300.0		
Pace Analytical  Signature of ANALYST  Signature of ANALYST							
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	REPORT APPROVED BY OWNER						DATE

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						ER.	REPORT APPROVED BY OWNER
						Pace Analytical	
		YST	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
		EPA 300.0	а	682	NONE	mg/l	SULFATES
		EPA 350.1	മ	21.9	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	Ø	2.8	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	മ	0.439	1.00	mg/l	PHOSPHORUS
		EPA 300.0	മ	4.0	8.00	mg/l	FLUORIDE
		EPA 170.1	a	48	NONE	°F	TEMPERATURE
		EPA 150.1	a	7.61	6.0 - 9.0	Units	рН
		EPA 160.2	a	29.0	NONE	SOLIDS mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	Ь	18	NONE	MGD	FLOW
REMARKS AND COMMENTS	REMARKS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS	PAR
					4/6/2005	ES	DATES OF ANALYSES
					PCS	TED BY	SAMPLES COLLECTED BY
					6:55	LED	TIME OF DAY SAMPLED
					4/5/2005		DATE SAMPLED
	covers PERIOD Through April 30, 2005	THIS REPORT COVERS PERIOD April 1 Through April 1		ONCE/MONTH GRAB		MONITORING MO/KS STATE LINE	REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE
TYPE OF FACILITY  Gypsum Stack	liation Trust	OWNER FI Missouri Remediation Trust	COUNTY JASPER	PERMIT NUMBER MO-0053627		FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack	FORMER FARMLAND
		X DISCHARGE	SIEWAIE	MUNICIPAL WA	TOX NON-	NFUES MONITORING REPORT FOR NON-MUNICIPAL WAS IEWATER DISCHARGES	NECEN MON
	<b>ס</b>				L QUALITY	DIVISION OF ENVIRONMENTAL QUALITY	DIVISION OF
				SOLIBOES	IATIIRAI RE	MISSOLIBI DEBARTMENT DE NATURAL RESOLIRCES	MISSOLIBIDI

DATE							REPORT APPROVED BY OWNER
						Pace Analytical	
		ALYST	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
		EPA 300.0	а	188	NONE	mg/l	SULFATES
		EPA 350.1	a	3.2	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	മ	1.0	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	മ	1	<u> </u>	mg/l	PHOSPHORUS
		EPA 300.0	മ	1.2	8.00	mg/l	FLUORIDE
		EPA 170.1	а	50	NONE	°F	TEMPERATURE
		EPA 150.1	a	7.95	6.0 - 9.0	Units	рН
		EPA 160.2	а	n/d	50	mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	Ь	0.18	NONE	MGD	FLOW
	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	OF ANALYSIS	FINAL LIMITS		PARAMETERS
					4/6/2005		DATES OF ANALYSES
					PCS		SAMPLES COLLECTED BY
					7:10		TIME OF DAY SAMPLED
					4/5/2005		DATE SAMPLED
	COVERS PERIOD  Through April 30, 2005	THIS REPORT COVERS PERIOD April 1 Through April 1		AB	ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack	liation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627		Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY		OWNER	COLINITY	DERMIT NI IMBER			EACH ITY NAME
	w	ER DISCHARGES	STEWAT	SOURCES Wunicipal wa	NATURAL RE L QUALITY T <b>FOR NON-I</b>	NMENTA	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHA

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						REPORT APPROVED BY OWNER
						Pace Analytical
		ALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
		EPA 300.0	а	208	NONE	SULFATES mg/l
		EPA 350.1	മ	4.3	NONE	NH <sub>3</sub> - N mg/l
		EPA 300.0	മ	N/D	NONE	NO <sub>3</sub> - N mg/l
		EPA 365.4	മ	N/D	1.00	PHOSPHORUS mg/l
		EPA 300.0	а	0.6	8.00	FLUORIDE mg/l
		EPA 170.1	а	60	NONE	TEMPERATURE °F
		EPA 150.1	a	7.80	6.0 - 9.0	Units
		EPA 160.2	а	N/D	NONE	TOTAL SUSPENDED SOLIDS mg/l
		ESTIMATE	σ	18	NONE	FLOW MGD
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS
		ANAI YTICAI	SAMPIF	ACTUAL RESULTS	4/5/2006 PERMITTED	DATES OF ANALYSES
					PCS	SAMPLES COLLECTED BY
					19:15	TIME OF DAY SAMPLED
					4/3/2006	DATE SAMPLED
	T COVERS PERIOD Through April 30, 2006	THIS REPORT COVERS PERIOD April 1 Through Ap		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE
Gypsum Stack	liation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627	(	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack
		EN DIOCHANGES	SIEWAI	NONICIPAL WA	TON NON-	NEDES MONITORING REPORT FOR NON-MONICIPAL WAS LEWATER DISCH
	n.		STEWAT	: VCCXCTV	L QUALITY	MISSOURI DEPAR I MENT OF NATURAL RESOURCES  NIDDES MONITORING REPORT FOR NON MINISTER AT
					1	

DATE							REPORT APPROVED BY OWNER
		ALYST	SIGNATURE OF ANALYST			Pace Analytical	ANALYSES PERFORMED BY
		EPA 300.0	а	1090	NONE	mg/l	SULFATES
		EPA 350.1	а	36.7	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	Ø	1.9	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	മ	0.9	_	mg/l	PHOSPHORUS
		EPA 300.0	а	3.4	8.00	mg/l	FLUORIDE
		EPA 170.1	а	64	NONE	°F	TEMPERATURE
		EPA 150.1	a	7.20	6.0 - 9.0	Units	рН
		EPA 160.2	а	9.0	50	.IDS mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	Ь	0.18	NONE	MGD	FLOW
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	TERS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED		
					4/5/2006		DATES OF ANALYSES
					PCS	βY	SAMPLES COLLECTED BY
					19:30		TIME OF DAY SAMPLED
					4/3/2006		DATE SAMPLED
	T COVERS PERIOD Through April 30, 2006	THIS REPORT COVERS PERIOD April 1 Through Ap		ΑB	ONCE/MONTH GRAB	RING	REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack		FI Missouri Remediation Trust	JASPER	MO-0053627		STRIES Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF EVOLUTA			COLINITY	DEDMIT NI IMBED			EACH ITY NAME
	w	ER DISCHARGES	STEWAT	SOURCES	JATURAL RE L QUALITY T <b>FOR NON-N</b>	ARTMENT OF N VIRONMENTA RING REPORI	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES		SECTION IN				
NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.	L QUALITY	/UNICIPAL WA	STEWAT	ER DISCHARGES	iii	
FACILITY NAME		PERMIT NUMBER	COUNTY	OWNER		TYPE OF FACILITY
Former FARMLAND INDUSTRIES Gypsum Stack		MO-0053627	JASPER	FI Missouri Remediation Trust		Gypsum Stack
REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PERIOD April 1 Through April 1	, 2007	
DATE SAMPLED	4/13/2007					
TIME OF DAY SAMPLED	6:15					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	4/14/2007					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
FLOW	NONE CINE	18	σ - Γ	ESTIMATE	NEWDINKO PIND COMINIENTO	ā
. SUSPENDED SOLIDS	NONE	11.0	a	EPA 160.2		
рН Units	6.0 - 9.0	7.10	മ	EPA 150.1		
TEMPERATURE °F	NONE	56	മ	EPA 170.1		
FLUORIDE mg/l	8.00	3.8	മ	EPA 300.0		
PHOSPHORUS mg/l	1.00	1.10	മ	EPA 365.4	sampled on 4/26/07	
NO <sub>3</sub> - N mg/l	NONE	2.1	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	4.7	മ	EPA 350.1		
SULFATES mg/l	NONE	218	മ	EPA 300.0		
ANALYSES PERFORMED BY  Page Analytical			SIGNATURE OF ANALYST	VALYST		
REPORT APPROVED BY OWNER						DATE

DATE							REPORT APPROVED BY OWNER
						Pace Analytical	
		ALYST	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
		EPA 300.0	а	571	NONE	mg/l	SULFATES
		EPA 350.1	а	2.7	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	മ	2.4	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	а	N/D	_	mg/l	PHOSPHORUS
		EPA 300.0	а	5.6	8.00	mg/l	FLUORIDE
		EPA 170.1	a	57	NONE	°F	TEMPERATURE
		EPA 150.1	а	7.60	6.0 - 9.0	Units	рН
		EPA 160.2	а	6.0	50	LIDS mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	Ь	0.18	NONE	MGD	FLOW
REMARKS AND COMMENTS	REMARKS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	TERS	PARAMETERS
					4/14/2007		DATES OF ANALYSES
					PCS	3Y	SAMPLES COLLECTED BY
					6:20		TIME OF DAY SAMPLED
					4/14/2007		DATE SAMPLED
	r covers PERIOD Through April 30, 2007	THIS REPORT COVERS PERIOD April 1 Through Ap		ΑB	ONCE/MONTH GRAB	DRING	REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack	liation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627	(	STRIES Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER			FACILITY NAME
	co	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES	STEWAT	SOURCES	VATURAL RE L QUALITY FOR NON-1	ARTMENT OF N	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY NPDES MONITORING REPORT FOR NON-MUNICIPAL

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						REPORT APPROVED BY OWNER
						Pace Analytical
		ALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
		EPA 300.0	മ	304	NONE	SULFATES mg/l
		EPA 350.1	മ	8.0	NONE	NH <sub>3</sub> - N mg/l
		EPA 300.0	മ	2.1	NONE	NO <sub>3</sub> - N mg/l
	was 1.02 / retested on 7/28/04	EPA 365.4	Ø	0.476	1.00	PHOSPHORUS mg/l
		EPA 300.0	ω	1.6	8.00	FLUORIDE mg/l
		EPA 170.1	മ	78	NONE	TEMPERATURE °F
		EPA 150.1	മ	7.13	6.0 - 9.0	pH Units
		EPA 160.2	മ	n/d	NONE	TOTAL SUSPENDED SOLIDS mg/l
		ESTIMATE	Ъ	18	NONE	FLOW MGD
S	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
			_		8/4/2004	DATES OF ANALYSES
					PCS	SAMPLES COLLECTED BY
					7:30	TIME OF DAY SAMPLED
					8/3/2004	DATE SAMPLED
	st 31, 2004	THIS REPORT COVERS PERIOD August 1 Through		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE
TYPE OF FACILITY  Gypsum Stack		OWNER FI Missouri Remediation Trust	COUNTY  JASPER	PERMIT NUMBER MO-0053627	^	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack
		ER DISCHARGE	STEWATI	WUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES
				) ) ; ) ) 1		

MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.  FACILITY NAME FORMER FARMILAND INDUSTRIES Gypsum Stack REQUIRED FREQUENCY OF MONITORING OUTFALL #003  DATE SAMPLED  ONCE/MONTH GRAB  NO-0053627  ONCE/MONTH GRAB  NO-0053627  ONCE/MONTH GRAB  NO-0053627  August	NATURAL RES AL QUALITY T FOR NON-MU  once/Month grab  8/3/2004	SOURCES  MUNICIPAL WA PERMIT NUMBER MO-0053627  AB	STEWAT COUNTY JASPER		VRGES  ri Remediation Trust  COVERS PERIOD  1 Through August 31, 2004	TYPE OF FACILITY Gypsum Stack
DATE SAMPLED TIME OF DAY SAMPLED SAMPLES COLLECTED BY	8/3/2004 7:10 PCS					
DATES OF ANALYSES  PARAMETERS	8/4/2004 PERMITTED FINAL LIMITS	ACTUAL RESULTS OF ANALYSIS	SAMPLE	ANALYTICAL	REMARKS AND COMMENTS	NTS
FLOW MGD	NONE	0.18	Ь	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	50	n/d	മ	EPA 160.2		
pH Units	6.0 - 9.0	6.70	മ	EPA 150.1		
TEMPERATURE °F	NONE	79	മ	EPA 170.1		
FLUORIDE mg/l	8.00	5.2	മ	EPA 300.0		
PHOSPHORUS mg/l	<b>-</b>	0.673	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	4.0	а	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	27.1	മ	EPA 350.1		
SULFATES mg/l	NONE	992	۵	EPA 300.0		
ANALYSES PERFORMED BY Pace Analytical	al		SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE							REPORT APPROVED BY OWNER
						Pace Analytical	
	,	1SA7	SIGNATURE OF ANALYST	•		ORMED BY	ANALYSES PERFORMED BY
		EPA 300.0	മ	396	NONE	mg/l	SULFATES
		EPA 350.1	മ	9.7	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	Ø	2.5	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	Ø	0.595	1.00		PHOSPHORUS
		EPA 300.0	മ	1.6	8.00	mg/l	FLUORIDE
		EPA 170.1	യ	72	NONE	URE °F	TEMPERATURE
		EPA 150.1	യ	7.34	6.0 - 9.0	Units	рH
		EPA 160.2	യ	5.0	NONE	TOTAL SUSPENDED SOLIDS mg/l	TOTAL SUS
		ESTIMATE	ъ	18	NONE	MGD	FLOW
/IENTS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS	
	-				8/3/2005	ANALYSES	DATES OF ANALYSES
					PCS	SAMPLES COLLECTED BY	SAMPLES C
					6:00	TIME OF DAY SAMPLED	TIME OF DA
					8/2/2005	PLED	DATE SAMPLED
	overs Period Through August 31, 2005	THIS REPORT COVERS PERIOD August 1 Through		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE	REQUIRED FREQ
TYPE OF FACILITY  Gypsum Stack	diation Trust	OWNER FI Missouri Remediation Trust	COUNTY JASPER	PERMIT NUMBER MO-0053627	^	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack	FACILITY NAME Former FAR
		ER DISCHARGE	STEWATI	MUNICIPAL WA	FOR NON-	NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES	NPDES
					L QUALITY	DIVISION OF ENVIRONMENTAL QUALITY	DIVISIO
				SOLIDOES	NATHBAL BE	MISSOLIBLUEBARTMENT OF NATURAL BESOLIBCES	IOSSIM

DATE			•			,	REPORT APPROVED BY OWNER
						Pace Analytical	
		ALYST	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
		EPA 300.0	a	1020	NONE	mg/l	SULFATES
		EPA 350.1	മ	31.2	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	Ø	4.1	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	മ	0.304	<u></u>	mg/l	PHOSPHORUS
		EPA 300.0	Ф	5.0	8.00	mg/l	FLUORIDE
		EPA 170.1	Ø	72	NONE	°F	TEMPERATURE
		EPA 150.1	മ	8.81	6.0 - 9.0	Units	рН
		EPA 160.2	מ	9.0	50	mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	ь	0.18	NONE	MGD	FLOW
	REMARKS AND COMMENTS	ANALY IICAL METHOD	SAMPLE TYPE	OF ANALYSIS	FINAL LIMITS		PARAMETERS
					8/3/2005		DATES OF ANALYSES
					PCS		SAMPLES COLLECTED BY
					6:15		TIME OF DAY SAMPLED
					8/2/2005		DATE SAMPLED
	COVERS PERIOD 1 Through August 31, 2005	THIS REPORT COVERS PERIOD August 1 Through		AB	ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack	diation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627	^	Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY		OWNER	COINTY	DERMIT NI IMBER			EACH ITY NAME
	(A	ER DISCHARGES	STEWAT	SOURCES	NATURAL RE L QUALITY I <b>FOR NON-</b> I	ENT OF NOTENTA	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHA

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES	VATURAL RE	SOURCES				
NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES	FOR NON-N	MUNICIPAL WA	STEWAT	ER DISCHARGE:	(A	
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER	COUNTY JASPER	owner FI Missouri Remediation Trust	liation Trust	TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PERIOD August 1 Through	r covers Period 1 Through August 31, 2006	
DATE SAMPLED	8/7/2006					
TIME OF DAY SAMPLED	17:30					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	8/10/2006					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		To
FLOW MGD	NONE	18	Ь	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	NONE	7.0	а	EPA 160.2		
pH Units	6.0 - 9.0	7.80	a	EPA 150.1		
TEMPERATURE °F	NONE	80	а	EPA 170.1		
FLUORIDE mg/l	8.00	4.0	a	EPA 300.0		
PHOSPHORUS mg/l	1.00	0.67	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	2.2	Ø	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	9.8	Ø	EPA 350.1		
SULFATES mg/l	NONE	501	Ø	EPA 300.0		
ANALYSES PERFORMED BY			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

DATE						,	REPORT APPROVED BY OWNER
						Pace Analytical	
		IN YET	SIGNATURE OF ANALYST				ANAL YORG BEREORMED BY
		EPA 300.0	a	996	NONE	mg/l	SULFATES
		EPA 350.1	മ	27.4	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	Ø	N/D	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	Ø	N/D	_	mg/l	PHOSPHORUS
		EPA 300.0	മ	6.5	8.00	mg/l	FLUORIDE
		EPA 170.1	മ	76	NONE	°F	TEMPERATURE
		EPA 150.1	۵	8.40	6.0 - 9.0	Units	рH
		EPA 160.2	മ	14.0	50	DS mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	Ь	0.18	NONE	MGD	FLOW
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	ERS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED		000000000000000000000000000000000000000
					8/10/2006		DATES OF ANALYSES
					PCS	,	SAMPLES COLLECTED BY
					17:50		TIME OF DAY SAMPLED
					8/7/2006		DATE SAMPLED
	1 Through August 31, 2006	THIS REPORT COVERS PERIOD August 1 Through		ΑB	ONCE/MONTH GRAB	NG	REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack		FI Missouri Remediation Trust	JASPER	MO-0053627		TRIES Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF EVOLUTA		OWNIED	COLINTY	DEDMIT NI IMBED			EACH ITY NAME
	w	ER DISCHARGES	STEWAT	SOURCES	VATURAL RE L QUALITY For Non-1	RTMENT OF NIRONMENTA	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE					REPORT APPROVED BY OWNER
					Pace Analytical
	LYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
	EPA 300.0	a	331	NONE	SULFATES mg/l
	EPA 350.1	а	5.8	NONE	NH <sub>3</sub> - N mg/l
	EPA 300.0	മ	2.6	NONE	NO <sub>3</sub> - N mg/l
	EPA 365.4	മ	0.70	1.00	PHOSPHORUS mg/l
	EPA 300.0	а	2.4	8.00	FLUORIDE mg/l
	EPA 170.1	a	76	NONE	TEMPERATURE °F
	EPA 150.1	а	7.10	6.0 - 9.0	pH Units
	EPA 160.2	а	8.0	NONE	TOTAL SUSPENDED SOLIDS mg/l
	ESTIMATE	Ь	18	NONE	FLOW MGD
REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
				8/8/2007	DATES OF ANALYSES
				PCS	SAMPLES COLLECTED BY
				6:30	TIME OF DAY SAMPLED
				8/7/2007	DATE SAMPLED
st 31, 2007	THIS REPORT COVERS PERIOD August 1 Through A		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE
	FI Missouri Remediation Trust	JASPER	MO-0053627	,	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY	OWNER	COLINTY	PERMIT NUMBER		EACH ITY NAME
	ER DISCHARGES	STEWATE	SOURCES	VATURAL RE L QUALITY T <b>FOR NON-I</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						Pace Analytical	REPORT APPROVED BY OWNER
		IALYST	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
		EPA 300.0	а	943	NONE	mg/l	SULFATES
		EPA 350.1	а	23.6	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	Ø	4.1	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	മ	N/D	_	mg/l	PHOSPHORUS
		EPA 300.0	а	7.1	8.00	mg/l	FLUORIDE
		EPA 170.1	а	76	NONE	°F	TEMPERATURE
		EPA 150.1	а	7.20	6.0 - 9.0	Units	рН
		EPA 160.2	а	N/D	50	DS mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	Ь	0.18	NONE	MGD	FLOW
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	ERS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED		DATES OF ANALYSES
					6/6/2007		DATES OF ANALYSES
					BC8	`	SAMBLES COLLECTED BY
					8/7/2007		DATE SAMPLED
	1 Through August 31, 2007	August 1 Throu		AB	ONCE/MONTH GRAB		OUTFALL #003
	ERIOD	THIS REPORT COVERS PERIOD				NG :	REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY  Gypsum Stack	iation Trust	OWNER FI Missouri Remediation Trust	COUNTY	PERMIT NUMBER MO-0053627		TRIES Gypsum Stack	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack
	co.	ER DISCHARGES	STEWAT	MUNICIPAL WA	L QUALITY	IRONMENTA	NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH
				SOLIDOES			MISSOLIBI DEBARTMENT OF NATURAL BESOLIBOES

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	TER DISCHARGES	STEWAT	JUNICIPAL WA	VATURAL RE L QUALITY I <b>for non-i</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE					REPORT APPROVED BY OWNER
					Pace Analytical
	ALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
	EPA 300.0	a	0.349	NONE	SULFATES mg/l
	EPA 350.1	മ	0.2	NONE	NH <sub>3</sub> - N mg/l
	EPA 300.0	മ	0.6	NONE	NO <sub>3</sub> - N mg/l
	EPA 365.4	Ø	0.349	1.00	PHOSPHORUS mg/l
	EPA 300.0	മ	N/D	8.00	FLUORIDE mg/l
	EPA 170.1	മ	48	NONE	TEMPERATURE °F
	EPA 150.1	a	7.69	6.0 - 9.0	pH Units
	EPA 160.2	മ	N/D	NONE	TOTAL SUSPENDED SOLIDS mg/l
	ESTIMATE	Ь	18	NONE	FLOW MGD
REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS
			701	12/8/2004	DATES OF ANALYSES
				PCS	SAMPLES COLLECTED BY
				6:50	TIME OF DAY SAMPLED
				12/7/2004	DATE SAMPLED
ecember 31, 2004	THIS REPORT COVERS PERIOD December 1 Throu		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE
ation Trust Gypsum Stack	FI Missouri Remediation Trust	JASPER	MO-0053627		Former FARMLAND INDUSTRIES Gypsum Stack
	OWNED	ODINITY	DEDMITNIIMDED		
	ER DISCHARGES	STEWAT	SOURCES	VATURAL RE L QUALITY NON-I	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MILAND INDUSTRIES Cypeum Stack  MILAND INDUSTRIES Cypeum Stack  MODIFICATION  MODIFICA	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES	NATURAL RE 1 QUALITY	SOURCES	STEWAT	ER DISCHARGE	CÓ	
TOSMINE   ONCEMNONTH GRAB   THIS SERVICE   TOUGH December 31, 2004	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stav		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remec	diation Trust	TYPE OF FACILITY  Gypsum Stack
D	REQUIRED FREQUENCY OF MONITORING OUTFALL #003	ONCE/MONTH GR	\В		THIS REPORT COVERS PO	ERIOD hrough December 31, 2004	
December   Poss   Pos	DATE SAMPLED	12/7/2004 6:00					
128/2004   PERMITTED	SAMPLES COLLECTED BY	PCS					
PERMITTED   ACTUAL RESULTS   SAMPLE   ANALYTICAL	DATES OF ANALYSES	12/8/2004					
MGD NONE 0.18 b ESTIMATE  Units 6.0-9.0 7.59 a EPA 190.2  Units 6.0-9.0 0.4 a EPA 300.0  mg/l NONE 1.1 a EPA 300.0  mg/l NONE 1.1 a EPA 300.0  mg/l NONE 4.3 a EPA 300.0  mg/l NONE 5.35 a EPA 300.0  Pace Analytical		PERMITTED FINAL LIMITS	ACTUAL RESULTS	SAMPLE	ANALYTICAL		VTC
OLIDS         mg/l         50         N/D         a         EPA 160.2           Units         6.0-9.0         7.59         a         EPA 150.1           °F         NONE         48         a         EPA 170.1           mg/l         8.00         0.4         a         EPA 300.0           mg/l         NONE         1.1         a         EPA 300.0           mg/l         NONE         4.3         a         EPA 300.0           mg/l         NONE         535         a         EPA 300.0           mg/l         NONE         535         a         EPA 300.0           a         EPA 300.0         EPA 300.0         EPA 300.0		NONE	0.18	р	ESTIMATE		
Units 6.0 - 9.0 7.59 a EPA 150.1    P		50	N/D	മ	EPA 160.2		
°F         NONE         48         a         EPA 170.1           mg/l         8.00         0.4         a         EPA 300.0           mg/l         1         0.143         a         EPA 305.4           mg/l         NONE         1.1         a         EPA 300.0           mg/l         NONE         4.3         a         EPA 300.0           mg/l         NONE         535         a         EPA 300.0           mg/l         NONE         535         a         EPA 300.0		6.0 - 9.0	7.59	മ	EPA 150.1		
mg/l   8.00   0.4   a   EPA 300.0   mg/l   1   0.143   a   EPA 365.4   mg/l   NONE   1.1   a   EPA 300.0   mg/l   NONE   4.3   a   EPA 300.0   mg/l   NONE   535   a   EPA 300.0   EPA 300.0   mg/l   NONE   535   a   EPA 300.0   EPA 300.0   mg/l   NONE   535   a   EPA 300.0   EPA 300.0   mg/l   NONE   535   a   EPA 300.0   EPA 300.0   EPA 300.0   mg/l   EPA 300.0		NONE	48	മ	EPA 170.1		
mg/l   1   0.143   a   EPA 365.4		8.00	0.4	മ	EPA 300.0		
MONE		<u> </u>	0.143	а	EPA 365.4		
mg/l NONE 4.3 a EPA 350.1  mg/l NONE 535 a EPA 300.0  Pace Analytical  MONE 535 b AR EPA 300.0  SIGNATURE OF ANALYST		NONE	1.1	Ø	EPA 300.0		
mg/l NONE 535 a EPA 300.0		NONE	4.3	മ	EPA 350.1		
Pace Analytical  Signature of ANALYST  Signature of ANALYST		NONE	535	۵	EPA 300.0		
Pace Analytical  SIGNATURE OF ANALYST  SIGNATURE OF ANALYST							
Pace Analytical  Signature of ANALYST  Signature of ANALYST							
Pace Analytical  SIGNATURE OF ANALYST							
Pace Analytical							
Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical SIGNATURE OF ANALYST							
SIGNATURE OF ANALYST  Pace Analytical							
				SIGNATURE OF AN	IALYST		
	REPORT APPROVED BY OWNER						DATE

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	VATURAL RE L QUALITY I <b>for non-i</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHA	VATURAL RE L QUALITY T <b>FOR NON-I</b>	ESOURCES Municipal wa	STEWAT	ER DISCHARGES	w	
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack	<sup>^</sup>	PERMIT NUMBER MO-0053627	COUNTY	OWNER FI Missouri Remediation Trust	liation Trust	TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PERIOD December 1 Throu	covers period ver 1 Through December 31, 2005	
DATE SAMPLED	12/6/2005					
TIME OF DAY SAMPLED	0:00					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	12/8/2005					
PARAMETERS	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL METHOD	REMARKS AND COMMENTS	STS
FLOW MGD	NONE	18	b	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	NONE	0.6	۵	EPA 160.2		
pH Units	6.0 - 9.0	7.40	۵	EPA 150.1		
TEMPERATURE °F	NONE	51	a	EPA 170.1		
FLUORIDE mg/l	8.00	2.5	۵	EPA 300.0		
PHOSPHORUS mg/l	1.00	0.55	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	2.8	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	10.9	മ	EPA 350.1		
SULFATES mg/l	NONE	504	מ	EPA 300.0		
ANALYSES PERFORMED BY			SIGNATURE OF ANALYST	ALYST		
Pace Analytical						1
REPORT APPROVED BY OWNER						DATE

DATE							REPORT APPROVED BY OWNER
						Pace Analytical	
		ALYST	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
		EPA 300.0	a	1100	NONE	mg/l	SULFATES
		EPA 350.1	а	26.7	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	മ	3.4	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	മ	N/D	_	mg/l	PHOSPHORUS
		EPA 300.0	മ	6.9	8.00	mg/l	FLUORIDE
		EPA 170.1	а	55	NONE	°F	TEMPERATURE
		EPA 150.1	а	8.00	6.0 - 9.0	Units	рH
		EPA 160.2	а	6.0	50	mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	Ь	0.18	NONE	MGD	FLOW
	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS		PARAMETERS
			CAMPIE	^OTI	12/8/2005		DATES OF ANALYSES
					PCS		SAMPLES COLLECTED BY
					6:20		TIME OF DAY SAMPLED
					12/6/2005		DATE SAMPLED
	THIS REPORT COVERS PERIOD  December 1 Through December 31, 2005	THIS REPORT COVERS PERIOD  December 1 Throu		AB	ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack	diation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627		Gypsum Stack	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack
	-4						
	cΩ	ER DISCHARGES	STEWAT	SOURCES	NATURAL RE L QUALITY <b>FOR NON-I</b>	ENT OF A	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHA

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	VATURAL RE L QUALITY I <b>for non-i</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						REPORT APPROVED BY OWNER
						Pace Analytical
		ALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
		EPA 300.0	a	1130	NONE	SULFATES mg/l
		EPA 350.1	Ø	32.1	NONE	NH <sub>3</sub> - N mg/l
		EPA 300.0	Ø	2.6	NONE	NO <sub>3</sub> - N mg/l
	2.4 on 12/4/2006	EPA 365.4	מ	1.2 -12/27	1.00	PHOSPHORUS mg/l
		EPA 300.0	മ	1.7	8.00	FLUORIDE mg/l
		EPA 170.1	മ	42	NONE	TEMPERATURE °F
		EPA 150.1	Ø	7.30	6.0 - 9.0	pH Units
		EPA 160.2	а	6.0	NONE	TOTAL SUSPENDED SOLIDS mg/l
		ESTIMATE	ь	18	NONE	FLOW MGD
S	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	12/7/2006 PERMITTED	DATES OF ANALYSES
					PCS	SAMPLES COLLECTED BY
					17:15	TIME OF DAY SAMPLED
					12/4/2006	DATE SAMPLED
	, 2006	THIS REPORT COVERS PERIOD Dec. 1 Through Dec. 31		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE
TYPE OF FACILITY  Gypsum Stack		OWNER FI Missouri Remed	JASPER	PERMIT NUMBER MO-0053627	^	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack
		ER DISCHARGE	STEWAT	NUNICIPAL WA	L QUALITY	NIOSCORI DEPARTMENT OF NATORAL RESCORCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES
					- - -	

NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.	NATURAL RE L QUALITY <b>f for non-n</b>	MUNICIPAL WA	STEWAT	ER DISCHARGES	Ë	
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY	OWNER FI Missouri Remediation Trust	diation Trust	TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING  OUTFALL #003	ONCE/MONTH GR	ΑB		THIS REPORT COVERS PERIOD Dec. 1 Through Do	T COVERS PERIOD Through Dec. 31, 2006	
DATE SAMPLED	12/4/2006					
TIME OF DAY SAMPLED	17:45					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	12/7/2006					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMENTS	NTS
FLOW MGD	NONE	0.18	Ь	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	50	59.0	a	EPA 160.2		
pH Units	6.0 - 9.0	8.60	а	EPA 150.1		
TEMPERATURE °F	NONE	50	മ	EPA 170.1		
FLUORIDE mg/l	8.00	3.6	а	EPA 300.0		
PHOSPHORUS mg/l	_	0.64 - 12/27	മ	EPA 365.4	2.3 on 12/4/06	
NO <sub>3</sub> - N mg/l	NONE	2.4	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	4.0	മ	EPA 350.1		
SULFATES mg/l	NONE	194	а	EPA 300.0		
ANALYSES PERFORMED BY			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOUR DE ENERGY MENT OF NATURAL RESOURCES           PURISON OF ENTRONMENTAL QUALTY           PARTY PRINCE MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES           PARTY PRINCED SOLUTIONS         CONCENSION OF BOOK AND ADMINISTRATE PRINCIPAL WASTEWATER DISCHARGES         DISCHARGES         PRINCIPAL ADMINISTRATE							
PRINTINGEN   PRI	MISSOURI DEPARTMENT OF N DIVISION OF ENVIRONMENTA NPDES MONITORING REPORT	VATURAL RE L QUALITY I <b>for Non-I</b>	WUNICIPAL WA	STEWAT	ER DISCHARGE:	w	
CREEK AT MON'S STATE LINE   CONCEMONTH GRAB   The SHADET CONSESSISSESSED	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remed		TYPE OF FACILITY  Gypsum Stack
AMPLED  DAY SAMPLED  DAY SAMPLED  DOF ANALYSES  COLLECTED BY  PCS  SCOLLECTED BY  PCS  COLLAR ESULTS  SAMPLE  PARAMETERS  FINAL LIMITS  DERMITTED  NONE  18  EDATACYSIS  PERMITTED  PORMALYSIS  PERMITTED  DERMITTED  NONE  17.0  18  EDA 170.1  18  EDA 180.0  1.1  18  EDA 170.1  18  EDA 200.0  DERMITTED  MITTHOD  NONE  1.1  18  EDA 300.0  EDA	REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PE February 1 Thr	oruary 28, 2005	
DAY SAMPLED   B-05	DATE SAMPLED	2/1/2005					
PCS   PCS	TIME OF DAY SAMPLED	8:05					
Permitted   Perm	SAMPLES COLLECTED BY	PCS					
PARAMETERS   FINAL LIMITS   OF ANALYSIS   TYPE   METHOD   REMARKS AND COMMEN   18	DATES OF ANALYSES	2/2/2005 PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
MGD NONE 18 b ESTIMATE  SUSPENDED SOLIDS mg/l NONE 17.0 a EPA 160.2  Units 6.0 - 9.0 7.55 a EPA 160.1  DE mg/l NONE 45 a EPA 300.0  HORUS mg/l NONE 1.0 a EPA 300.0  mg/l NONE 1.0 a EPA 300.0  ES mg/l NONE 1.7 a EPA 300.1  ES mg/l NONE 1.7 a EPA 300.1  ES mg/l NONE 1.3 a EPA 300.0  PROVINCIO BY OWNER 134 a EPA 300.0  SOLITION AND EPA 300.0	PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMENT	ITS
SUSPENDED SOLIDS   mg/l   NONE   17.0   a   EPA 160.2		NONE	18	σ	ESTIMATE		
Units 6.0-9.0 7.55 a EPA 15.0.1  AATURE °F NONE 45 a EPA 770.1  DE mg/l 8.00 1.1 a EPA 300.0  HORUS mg/l 1.00 0.639 a EPA 300.0  mg/l NONE 1.7 a EPA 300.0  ES mg/l NONE 1.34 a EPA 300.0  ES mg/l NONE 1.34 a EPA 300.0  PERTORNED BY  Pace Analytical  Pace Analytical		NONE	17.0	മ	EPA 160.2		
NATURE         %F         NONE         45         a         EPA 170.1           DE         mg/l         8.00         1.1         a         EPA 300.0           HORUS         mg/l         1.00         0.639         a         EPA 365.4         EPA 365.4           mg/l         NONE         1.7         a         EPA 300.0         EPA 300.0           ES         mg/l         NONE         134         a         EPA 300.0         EPA 300.0           ES         mg/l         NONE         134         a         EPA 300.0         EPA 300.0           ES         mg/l         NONE         134         a         EPA 300.0         EPA 300.0		6.0 - 9.0	7.55	മ	EPA 150.1		
DE         mg/l         8.00         1.1         a         EPA 300.0           HORUS         mg/l         1.00         0.639         a         EPA 365.4         EPA 365.4           mg/l         NONIE         1.0         a         EPA 300.0         EPA 300.0           ES         mg/l         NONIE         134         a         EPA 300.0           ES         mg/l         NONIE         134         a         EPA 300.0           EPA 300.0         EPA 300.0         EPA 300.0         EPA 300.0		NONE	45	മ	EPA 170.1		
HORUS mg/l 1.00 0.839 a EPA 305.4  mg/l NONE 1.7 a EPA 300.0  mg/l NONE 134 a EPA 300.0  ES mg/l NONE 134 a EPA 300.0  PERFORMED BY OWNER  The complete of ANALYST Processing the complete of ANALYST Processing the complete of the complete		8.00	1.1	മ	EPA 300.0		
NONE   1.0   a   EPA 300.0		1.00	0.639	മ	EPA 365.4		
NONE   1.7   a   EPA 350.1		NONE	1.0	a	EPA 300.0		
mg/l NONE 134 a EPA 300.0		NONE	1.7	മ	EPA 350.1		
Pace Analytical  Signature of ANALYST  Signature of ANALYST		NONE	134	a	EPA 300.0		
Pace Analytical  SIGNATURE OF ANALYST  SIGNATURE OF ANALYST							
Pace Analytical  SIGNATURE OF ANALYST	-						
Pace Analytical  SIGNATURE OF ANALYST							
Pace Analytical SIGNATURE OF ANALYST							
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Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical	ANALYSES DERECRMED BY			SIGNATURE OF AN	AI YST		
	Pace Analytical						
	REPORT APPROVED BY OWNER						DATE

DATE							REPORT APPROVED BY OWNER
						Pace Analytical	
		ALYST .	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
		EPA 300.0	а	819	NONE	mg/l	SULFATES
		EPA 350.1	മ	17.8	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	מ	2.8	NONE	mg/l	NO <sub>3</sub> - N
	1.07 so tested again on 2/28/05	EPA 365.4	Ø	0.32	_	mg/l	PHOSPHORUS
		EPA 300.0	മ	1.0	8.00	mg/l	FLUORIDE
		EPA 170.1	മ	48	NONE	°F	TEMPERATURE
		EPA 150.1	Ø	6.82	6.0 - 9.0	Units	РH
		EPA 160.2	מ	21.0	50	os mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	ь	0.18	NONE	MGD	FLOW
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	RS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	2/2/2005 PERMITTED		DATES OF ANALYSES
					PCS		SAMPLES COLLECTED BY
					8:15		TIME OF DAY SAMPLED
					2/1/2005		DATE SAMPLED
	THIS REPORT COVERS PERIOD February 1 Through February 28, 2005	THIS REPORT COVERS PERIOD February 1 Throug		AB	ONCE/MONTH GRAB	VG	REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack	diation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627		「RIES Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER			FACILITY NAME
	(A	ER DISCHARGES	STEWAT	SOURCES	VATURAL RE L QUALITY For Non-1	RTMENT OF N TRONMENTA	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.	VATURAL RE L QUALITY <b>I For Non-I</b>	WUNICIPAL WA	STEWAT	ER DISCHARGES	w	
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remediation Trust		TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PERIOD	тніз REPORT COVERS PERIOD February 1 Through February 28, 2006	
DATE SAMPLED	2/6/2006					
TIME OF DAY SAMPLED  SAMPLES COLLECTED BY	17:30 PCS					
DATES OF ANALYSES	2/8/2006					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMENTS	NTS
FLOW MGD	NONE	18	ъ	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	NONE	N/D	Ø	EPA 160.2		
pH Units	6.0 - 9.0	7.30	മ	EPA 150.1		
TEMPERATURE °F	NONE	52	മ	EPA 170.1		
FLUORIDE mg/l	8.00	1.4	മ	EPA 300.0		
PHOSPHORUS mg/l	1.00	0.73	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	2.9	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	10.4	മ	EPA 350.1		
SULFATES mg/l	NONE	471	Ø	EPA 300.0		
ANALYSES PERFORMED BY			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.	VATURAL RE IL QUALITY I For Non-N	MUNICIPAL WA	STEWAT	ER DISCHARGES	co	
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY	OWNER FI Missouri Remediation Trust		TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING  OUTFALL #003	ONCE/MONTH GR	ΑB		THIS REPORT COVERS PERIOD	oruary 28, 2006	
DATE SAMPLED	2/6/2006					
TIME OF DAY SAMPLED	18:15					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	2/8/2006					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
TARAMETERO	NONE LIMITO	OF ANALTSIS	- T	ESTIMATE	ZEMAZZO AND COMMEN O	0
. SUSPENDED SOLIDS	50	15.0	а	EPA 160.2		
pH Units	6.0 - 9.0	6.70	а	EPA 150.1		
TEMPERATURE °F	NONE	54	а	EPA 170.1		
FLUORIDE mg/l	8.00	1.7	മ	EPA 300.0		
PHOSPHORUS mg/l	_	0.85	Ø	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	2.8	Ø	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	33.2	a	EPA 350.1		
SULFATES mg/l	NONE	1240	מ	EPA 300.0		
ANALYSES PERFORMED BY			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						REPORT APPROVED BY OWNER
						Pace Analytical
		IALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
		EPA 300.0	а	292	NONE	SULFATES mg/l
		EPA 350.1	а	4.5	NONE	NH <sub>3</sub> - N mg/l
		EPA 300.0	മ	1.9	NONE	NO <sub>3</sub> - N mg/l
-1.3)	(retest on 2/19/08 - 1.1) (retest on 2/29/08 -1.3)	EPA 365.4	Ф	1.10	1.00	PHOSPHORUS mg/l
		EPA 300.0	а	2.2	8.00	FLUORIDE mg/l
		EPA 170.1	а	53	NONE	TEMPERATURE °F
		EPA 150.1	а	7.30	6.0 - 9.0	pH Units
		EPA 160.2	а	N/D	NONE	TOTAL SUSPENDED SOLIDS mg/l
		ESTIMATE	Ь	18	NONE	FLOW MGD
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED	ONITO OI MINNEI OFO
					2/6/2008	DATES OF ANALYSES
					6:30	SAMPLES COLLECTED BY
					0:00	TIME OF DAY SAMPLED
					2/5/2008	DATE SAMPLED
	THIS REPORT COVERS PERIOD February1 Through February 29, 2008	THIS REPORT COVERS PERIOD February1 Throug		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE
Gypsum Stack	diation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627		Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		-ACILITY NAME
	ï	ER DISCHARGES	STEWAT	ISOURCES	VATURAL RE L QUALITY FOR NON-I	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY <b>NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH</b> .

DATE						REPORT APPROVED BY OWNER
					Pace Analytical	
	NALYST	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
	EPA 300.0	മ	756	NONE	mg/l	SULFATES
	EPA 350.1	മ	14.3	NONE	mg/l	NH <sub>3</sub> - N
	EPA 300.0	മ	2.9	NONE	mg/l	NO <sub>3</sub> - N
	EPA 365.4	മ	0.65	_	mg/l	PHOSPHORUS
	EPA 300.0	മ	4.7	8.00	mg/l	FLUORIDE
	EPA 170.1	മ	58	NONE	°F	TEMPERATURE
	EPA 150.1	മ	7.10	6.0 - 9.0	Units	рН
	EPA 160.2	മ	N/D	50	OLIDS mg/l	TOTAL SUSPENDED SOLIDS
	ESTIMATE	σ	0.18	NONE	MGD	FLOW
REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS	PARAN
	ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED		DATES OF ANALYSES
				2/5/2000		SATES OF ANALYSES
				DCS	) BV	SAMBLES COLLECTED I
				6:40	ָל ויי	TIME OF DAY SAMPLE
	-			2/5/2008		DATE SAMPLED
ruary 29, 2008	THIS REPORT COVERS PERIOD February 1 Throug		ΔB	ONCE/MONTH GRAB	ITORING	REQUIRED FREQUENCY OF MONITORING OUTFALL #003
	FI Missouri Remediation Trust	JASPER	MO-0053627		Former FARMLAND INDUSTRIES Gypsum Stack	Former FARMLAND INC
TYPE OF FACILITY	OWNER	COUNTY	PERMIT NUMBER			FACILITY NAME
co	ER DISCHARGES	STEWAT	MUNICIPAL WA	VATURAL RE L QUALITY FOR NON-I	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.	MISSOURI DER DIVISION OF E NPDES MONIT

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.  FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE  ONCE/MONTH GRAB  THIS REPORT ONCE/MONTH GRAB  THIS REPORT ONCE/MONTH GRAB	VATURAL RE L QUALITY <b>I FOR NON-N</b>	SOURCES  WUNICIPAL WA PERMIT NUMBER MO-0053627  ONCE/MONTH GRAB	STEWAT COUNTY JASPER	ER DISCHARGES  OWNER FI Missouri Remediation Trust THIS REPORT COVERS PERIOD January 1 Through Janu	ISCHARGES  OWNER FI Missouri Remediation Trust  THIS REPORT COVERS PERIOD  January 1 Through January 31, 2005	TYPE OF FACILITY  Gypsum Stack
DATE SAMPLED TIME OF DAY SAMPLED	1/10/2005 10;00					
SAMPLES COLLECTED BY  DATES OF ANALYSES	PCS 1/12/2005					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMENTS	NTS
TOTAL SUSPENDED SOLIDS mg/l	NONE	17.0	מ פ	EPA 160.2		
pH Units	6.0 - 9.0	7.15	а	EPA 150.1		
TEMPERATURE °F	NONE	48	മ	EPA 170.1		
FLUORIDE mg/l	8.00	1.4	מ	EPA 300.0		
PHOSPHORUS mg/l	1.00	0.888	മ	EPA 365.4	1.59 so tested again on 1/31/05	
NO <sub>3</sub> - N mg/l	NONE	1.0	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	1.3	മ	EPA 350.1		
SULFATES mg/l	NONE	86.8	Ø	EPA 300.0		
ANALYSES PERFORMED BY Pace Analytical			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

DATE					REPORT APPROVED BY OWNER
					Pace Analytical
	1SA7	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
	EPA 300.0	മ	148	NONE	SULFATES mg/l
	EPA 350.1	മ	2.3	NONE	NH <sub>3</sub> - N mg/l
	EPA 300.0	മ	0.7	NONE	NO <sub>3</sub> - N mg/l
	EPA 365.4	മ	0.499	_	PHOSPHORUS mg/l
	EPA 300.0	മ	1.0	8.00	FLUORIDE mg/l
	EPA 170.1	മ	47	NONE	TEMPERATURE °F
	EPA 150.1	മ	6.80	6.0 - 9.0	Units
	EPA 160.2	മ	14.0	50	TOTAL SUSPENDED SOLIDS mg/l
	ESTIMATE	σ	0.18	NONE	FLOW MGD
REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS
		)	7 1 1 1 1 1 1 1	1/12/2005	DATES OF ANALYSES
				PCS	SAMPLES COLLECTED BY
				10:15	TIME OF DAY SAMPLED
				1/10/2005	DATE SAMPLED
uary 31, 2005	THIS REPORT COVERS PERIOD  January 1 Through		ΑB	ONCE/MONTH GRAB	REQUIRED FREQUENCY OF MONITORING OUTFALL #003
	FI Missouri Remediation Trust	JASPER	MO-0053627		Former FARMLAND INDUSTRIES Gypsum Stack
TYDE OF FACILITY	OWNER	COLINTY	PERMIT NUMBER		FACILITY NAME
	ER DISCHARGES	STEWATI	SOURCES	VATURAL RE L QUALITY NON-N	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						REPORT APPROVED BY OWNER
						Pace Analytical
		ALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
		EPA 300.0	а	539	NONE	SULFATES mg/l
		EPA 350.1	а	14.0	NONE	NH <sub>3</sub> - N mg/l
		EPA 300.0	മ	2.9	NONE	NO <sub>3</sub> - N mg/l
4.3	Sampled 1/17/06 4.4 // sampled 1/04/06 4.3	EPA 365.4	Ф	0.86	1.00	PHOSPHORUS mg/l
		EPA 300.0	മ	2.9	8.00	FLUORIDE mg/l
		EPA 170.1	a	43	NONE	TEMPERATURE °F
		EPA 150.1	മ	7.20	6.0 - 9.0	pH Units
		EPA 160.2	മ	5.0	NONE	TOTAL SUSPENDED SOLIDS mg/l
		ESTIMATE	Ь	18	NONE	FLOW MGD
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED	711 = 0 01 711 71 = 1 0 = 0
					1/4/2006	DATES OF ANALYSES
					PCS	SAMPLES COLLECTED BY
					6:20	TIME OF DAY SAMPLED
					1/3/2006	DATE SAMPLED
	THIS REPORT COVERS PERIOD  January 1 Through January 31, 2006	THIS REPORT COVERS PERIOD  January 1 Through		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE
Gypsum Stack	diation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627		Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		-ACILITY NAME
	Ċ	ER DISCHARGES	STEWAT	SOURCES	VATURAL RE L quality For non-1	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.

		EPA 350.1	מ מ	30.9 1300	NONE		NH <sub>3</sub> - N
		EPA 300.0 EPA 365.4 EPA 300.0	מ מ מ	53 1.2 N/D 2.9	NONE NONE	TURE %F = mg/l	TEMPERATURE FLUORIDE PHOSPHORUS NO <sub>3</sub> - N
OMMENTS	REMARKS AND COMMENTS	ANALYTICAL METHOD ESTIMATE EPA 160.2 EPA 150.1	SAMPLE TYPE b	ACTUAL RESULTS OF ANALYSIS 0.18 N/D 6.90	PERMITTED FINAL LIMITS NONE 50 6.0 - 9.0	PARAMETERS MGD FLOW MGD TOTAL SUSPENDED SOLIDS mg/l pH Units	FLOW TOTAL SU
					1/3/2006 6:35 PCS 1/4/2006	DATE SAMPLED TIME OF DAY SAMPLED SAMPLES COLLECTED BY DATES OF ANALYSES	DATE SAMPLED TIME OF DAY S/ SAMPLES COLL DATES OF ANAL
TYPE OF FACILITY  Gypsum Stack	ISCHARGES  OWNER FI Missouri Remediation Trust THIS REPORT COVERS PERIOD  January 1 Through January 31, 2006	OWNER FI Missouri Remediation Trust THIS REPORT COVERS PERIOD January 1 Through Janu	STEWAT COUNTY JASPER	SOURCES  WUNICIPAL WA PERMIT NUMBER MO-0053627  AB	L QUALITY  FOR NON-MI  MO  ONCE/MONTH GRAB	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES  FACILITY NAME FORMER FARMILAND INDUSTRIES Gypsum Stack OUTFALL #003  ONCE/MONTH GRAB  MISSOURCES  PERMIT NUMBER MO-0053627  MO-0053627  MO-0053627  FI MISSOURI Remedia THIS REPORT COVERS PER January 1 Throu	MISSOUR DIVISION NPDES MI FACILITY NAME FORMER FARML REQUIRED FREQUENCE OUTFALL #003

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURD DE PARTIMENT OF NATURAL RESOURCES           NUMISSOUN OF ENTRONOMENTAL QUALTY           PARTIFICATION OF THE NON-MUNICIPAL WASTEWATER DISCHARGES           PARTIFICATION OF THE NON-MUNICIPAL WASTEWATER DISCHAR							
PARMANDINJUSTRIES Oppourn State   PARMANDING   PARMANDI	MISSOURI DEPARTMENT OF N DIVISION OF ENVIRONMENTA NPDES MONITORING REPORT	IATURAL RE L'QUALITY T <b>FOR NON-N</b>	WUNICIPAL WA	STEWAT	ER DISCHARGE:	(A	
TORERACH NOWS STATE LINE   1/9/2007	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remed		TYPE OF FACILITY  Gypsum Stack
SAMPLED   1/9/2007   SAMPLED   SAM	REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PE	ะRIOD า Jan. 31, 2007	
SPDAY SAMPLED   PCS	DATE SAMPLED	1/9/2007					
OF ANALYSES         1/10/2007           PARAMETERS         PERMITTED FINAL IMPTS         ACTUAL RESULTS OF ANALYSIS         SAMPLE NUTHOD         ANALYTICAL REMARKS AND COMMEN           SUSPENDED SOLIDS         mg01         NONE	TIME OF DAY SAMPLED SAMPLES COLLECTED BY	6:15 PCS					
PARAMETERS   PERMITTED   ACTUAL RESULTS   SAMPLE   ANALYTICAL   REMARKS AND COMMEN   MGD   NONE   18   b   ESTIMATE	DATES OF ANALYSES	1/10/2007					
PARAMETERS		PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
MIGD NONE 18 b ESTIMATE  SUSPENDED SOLIDS mg/l NONE N/D a EPA 160.2  IRATURE 'F NONE 45 a EPA 150.1  HORUS mg/l 1.00 0.61 a EPA 300.0  MONE 2.1 a EPA 300.0  MONE 5.4 a EPA 300.0  MONE 5.4 a EPA 300.0  MONE 5.4 a EPA 300.0  MONE 281 a EPA 300.0  FERFORMED BY  Page Analytical  BESTIMATE	PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMEN	NTS
SUSPENDED SOLIDS    Major   Monte   Major   A   EPA 160.2	M	NONE	18	σ	ESTIMATE		
AATURE   AATURE  AATURE  AATURE  MATURE  PROVED BY OWNER  A SO.0  1.2  A SO.0  1.2  A SO.0  A	TAL SUSPENDED SOLIDS	6.0 - 9.0	7.30	ນ ທ	EPA 160.2		
DE		NONE	45	а	EPA 170.1		
HORUS mg/l 1.00 0.61 a EPA 305.4  mg/l NONE 2.1 a EPA 300.0  mg/l NONE 5.4 a EPA 300.0  ES mg/l NONE 281 a EPA 300.0  EPA		8.00	1.2	а	EPA 300.0		
NONE   2.1   a   EPA 300.0		1.00	0.61	മ	EPA 365.4		
ES mg/l NONE 281 a EPA 350.1  EN MG/l NONE 281 a EPA 300.0  EPA 350.1  AND MG/l AND MONE 281 a EPA 300.0  EPA 350.1  AND MG/l AND MONE 281 a EPA 300.0  EPA 350.1  EP		NONE	2.1	a	EPA 300.0		
mg/l NONE 281 a EPA 300.0		NONE	5.4	മ	EPA 350.1		
Pace Analytical  SIGNATURE OF ANALYST  SIGNATURE OF ANALYST		NONE	281	מ	EPA 300.0		
Pace Analytical  SIGNATURE OF ANALYST							
Pace Analytical  SIGNATURE OF ANALYST  Pace Analytical	_						
Pace Analytical  SIGNATURE OF ANALYST							
Pace Analytical							
Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical							
				SIGNATURE OF AN	ALYST		
	REPORT APPROVED BY OWNER						DATE

DATE		ALYST	SIGNATURE OF ANALYST			Pace Analytical	ANALYSES PERFORMED BY REPORT APPROVED BY OWNER
		EPA 300.0	a	834	NONE	mg/l	SULFATES
		EPA 350.1	a	24.8	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	מ	3.9	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	Ф	N/D	_	mg/l	PHOSPHORUS
		EPA 300.0	മ	4.7	8.00	mg/l	FLUORIDE
		EPA 170.1	a	48	NONE	٥Е	TEMPERATURE
		EPA 150.1	മ	8.00	6.0 - 9.0	Units	рH
		EPA 160.2	а	N/D	50	IDS mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	ь	0.18	NONE	MGD	FLOW
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	ERS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED		DATES OF ANALYSES
					PCS	*	SAMPLES COLLECTED BY
					17:45		TIME OF DAY SAMPLED
					1/9/2007		DATE SAMPLED
	T COVERS PERIOD Through Jan. 31, 2007	Jan. 1 Through Ja		AB	ONCE/MONTH GRAB	RING	REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack		FI Missouri Remediation Trust	JASPER	MO-0053627		STRIES Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER			FACILITY NAME
	w	ER DISCHARGES	STEWAT	SOURCES	VATURAL RE L QUALITY For Non-1	RTMENT OF N	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.  FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE  ONCE/MONTH GRAB  THIS REPORT ONCE/MONTH GRAB  THIS REPORT ONCE/MONTH GRAB  Januar	VATURAL RE L QUALITY <b>I FOR NON-N</b>	SOURCES  MUNICIPAL WA  PERMIT NUMBER  MO-0053627  ONCE/MONTH GRAB	STEWAT COUNTY JASPER	ER DISCHARGES  OWNER FI Missouri Remediation Trust THIS REPORT COVERS PERIOD January 1 Through Janu	ISCHARGES  OWNER FI Missouri Remediation Trust  THIS REPORT COVERS PERIOD  January 1 Through January 31, 2008	TYPE OF FACILITY  Gypsum Stack
DATE SAMPLED TIME OF DAY SAMPLED	1/8/2008 6:35					
SAMPLES COLLECTED BY  DATES OF ANALYSES	PCS 1/9/2008					
PARAMETERS	PERMITTED FINAL LIMITS	ACTUAL RESULTS	SAMPLE	ANALYTICAL METHOD	REMARKS AND COMMENTS	NTS
FLOW MGD	NONE	18	ъ	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	NONE	N/D	മ	EPA 160.2		
pH Units	6.0 - 9.0	7.40	മ	EPA 150.1		
TEMPERATURE °F	NONE	54	മ	EPA 170.1		
FLUORIDE mg/l	8.00	1.1	מ	EPA 300.0		
PHOSPHORUS mg/l	1.00	0.67	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	1.4	۵	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	2.8	മ	EPA 350.1		
SULFATES mg/l	NONE	163	۵	EPA 300.0		
ANALYSES PERFORMED BY Pace Analytical			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

		1				
NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH	VATORAL RE L QUALITY <b>T FOR NON-N</b>	MUNICIPAL WA	STEWAT	ER DISCHARGES	w	
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remediation Trust		TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING  OUTFALL #003	ONCE/MONTH GR	AB		THIS REPORT COVERS PERIOD  January1 Through	ary 31, 2008	
DATE SAMPLED	1/8/2008					
TIME OF DAY SAMPLED	7:00					
DATES OF ANALYSES	1/9/2008					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMENTS	ITS
FLOW MGD	NONE	0.18	ъ	ESTIMATE		
TOTAL SUSPENDED SOLIDS mg/l	50	N/D	മ	EPA 160.2		
pH Units	6.0 - 9.0	7.10	മ	EPA 150.1		
TEMPERATURE °F	NONE	57	മ	EPA 170.1		
FLUORIDE mg/l	8.00	3.5	മ	EPA 300.0		
PHOSPHORUS mg/l	_	0.66	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	4.2	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	20.7	മ	EPA 350.1		
SULFATES mg/l	NONE	731	۵	EPA 300.0		
ANALYSES PERFORMED BY  Page Analytical			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	L QUALITY	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

DATE						ED BY OWNER	REPORT APPROVED BY OWNER
						Pace Analytical	
	•	ALYST	SIGNATURE OF ANALYST	•		RMED BY	ANALYSES PERFORMED BY
		EPA 300.0	a	376	NONE	mg/l	SULFATES
		EPA 350.1	മ	9.2	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	Ø	2.3	NONE	mg/l	NO <sub>3</sub> - N
	1.47 on 7/13/05	EPA 365.4	מ	0.432	1.00		PHOSPHORUS
		EPA 300.0	מ	2.0	8.00	mg/l	FLUORIDE
		EPA 170.1	മ	72	NONE	JRE °F	TEMPERATURE
		EPA 150.1	മ	7.13	6.0 - 9.0	Units	Ħ
		EPA 160.2	מ	6.0	NONE	TOTAL SUSPENDED SOLIDS mg/l	TOTAL SUSF
		ESTIMATE	ь	18	NONE	MGD	FLOW
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	PARAMETERS	
		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2000	A D T T T T T T T T T T T T T T T T T T	7/14/2005	NALYSES	DATES OF ANALYSES
					PCS	SAMPLES COLLECTED BY	SAMPLES CO
					6:30	Y SAMPLED	TIME OF DAY SAMPLED
					7/13/2005	LED	DATE SAMPLED
	COVERS PERIOD hrough July 31, 2005	July 1 Through Ju		ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE	REQUIRED FREQUE
Gypsum Stack	diation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627		Former FARMLAND INDUSTRIES Gypsum Stack	Former FARN
TYPE OF FACILITY		OWNER	COLINTY	DERMIT NUMBER			FACILITY NAME
	iii	ER DISCHARGES	STEWAT	ISOURCES	VATURAL RE L QUALITY T <b>FOR NON-I</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHA	MISSOU DIVISION NPDES I

DATE			•			,	REPORT APPROVED BY OWNER
						Pace Analytical	
		ALYST	SIGNATURE OF ANALYST				ANALYSES PERFORMED BY
		EPA 300.0	a	927	NONE	mg/l	SULFATES
		EPA 350.1	а	28.5	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	ø	3.2	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	Ø	0.81	<u> </u>	mg/l	PHOSPHORUS
		EPA 300.0	Ø	4.2	8.00	mg/l	FLUORIDE
		EPA 170.1	മ	72	NONE	°F	TEMPERATURE
		EPA 150.1	а	7.02	6.0 - 9.0	Units	pH
		EPA 160.2	മ	n/d	50	mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	Ь	0.18	NONE	MGD	FLOW
	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS		PARAMETERS
				777777777777777777777777777777777777777	7/14/2005		DATES OF ANALYSES
					PCS		SAMPLES COLLECTED BY
					6:45		TIME OF DAY SAMPLED
					7/13/2005		DATE SAMPLED
	hrough July 31, 2005	THIS REPORT COVERS PERIOD  July 1 Through Ju		AB	ONCE/MONTH GRAB		REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack	diation Trust	FI Missouri Remediation Trust	JASPER	MO-0053627		Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER			FACILITY NAME
	(A	ER DISCHARGES	STEWAT	WUNICIPAL WA	VATURAL RE L QUALITY T <b>FOR NON-I</b>	NMENTA REPORT	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHA

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	VATURAL RE L QUALITY I <b>for non-i</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOUR DEPARTMENT OF NATURAL RESOURCES           DIVISION OF ENTRONOMENTAL QUALITY           ROWNERS MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES           NAME SOURCES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES         DISCHARGES         PRESENTATIONS STATELINE         CONCENCIONITY         DIVISION OF ENTROL         PRESENTATIONS STATELINE         CONCENCIONITY         DIVISION OF ENTROL         PRESENTATIONS STATELINE         CONCENCIONITY         DIVISION OF ENTROL         PRESENTATION OF THE CONCENTRATION OF TH							
PRINTAMENTAL   PRINTAMENTAL	NESCORI DEPARIMENT OF NOTICE MENTA NECES MONITORING REPORT	L QUALITY	WUNICIPAL WA	STEWAT	ER DISCHARGE:	co.	
CREEMONONS STATE LINE   CONCEMONTH GRAB   This servort correst reprovations	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY	OWNER FI Missouri Remed	diation Trust	TYPE OF FACILITY  Gypsum Stack
AMPLED  DAY SAMPLED  13:00  FOR ANALYSIS  SCOLLECTED BY  PCS  SCOLLECTED BY  PCS  SCOLLECTED BY  PCS  SCOLLECTED BY  PCS  SCOLLECTED BY  PCS  PCRIMITED  PCRANATED  ACTUAL RESULTS  PCRANATE  PCRANATED  ACTUAL RESULTS  PCRANATE  PCRANATED  ACTUAL RESULTS  PCRANATE  ACTUAL RESULTS  PCRANATE  ACTUAL RESULTS  PCRANATE  ACTUAL RESULTS  PCRANATE  ACTUAL RESULTS  PCRANATE  ACTUAL RESULTS  ACTU	REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PE	ERIOD 1 July 31, 2006	
DAY SAMPLED   13:00   PCS   PCS	DATE SAMPLED	7/10/2006					
OF ANALYSES         7/13/2006         ACTUAL RESULTS         SAMPLE         ANALYTICAL REMARKS AND COMMEN           PARAMETERS         FINAL LIMITS         OF ANALYSIS         TYPE         METHOD         REMARKS AND COMMEN           SUSPENDED SOLIDS         mg/l         NONE         10.0         a         EPA 150.1         ESTIMATE           ACTURE         °F         NONE         76         a         EPA 150.1         EPA 150.1           DE         mg/l         1.00         0.92         a         EPA 300.0         EPA 300.0           HORUS         mg/l         NONE         2.7         a         EPA 300.0         EPA 300.0           EES         mg/l         NONE         2         a         EPA 300.0         EPA 300.0           EES         mg/l         NONE         505         a         EPA 300.0         EPA 300.0           EES         mg/l         NONE         505         a         EPA 300.0         EPA 300.0	TIME OF DAY SAMPLED SAMPLES COLLECTED BY	13:00 PCS					
PARAMETERS   PERMITTED   ACTUAL RESULTS   SAMPLE   ANALYTICAL   REMARKS AND COMMEN   MGD   NONE   18   DE STIMATE    SUSPENDED SOLIDS   mg/l   NONE   10.0   a   EPA 150.1    Units   6.0-9.0   8.00   a   EPA 150.1    DE   mg/l   1.00   0.92   a   EPA 300.0    HORUS   mg/l   NONE   2   a   EPA 300.0    ES   mg/l   NONE   13.6   a   EPA 300.0    ES   mg/l   NONE   505   a   EPA 300.0    ES   mg/l   NONE   505   a   EPA 300.0    PERMARKS AND COMMEN   REMARKS AND COMMEN    PERMARKS AND COMMEN   REMARKS AND COMMEN   REMARKS AND COMMEN    REMARKS AND COMMEN   REPA 50.1    REPA 300.0   a   EPA 300.0    BEPA	DATES OF ANALYSES	7/13/2006					
PARAMETERS		PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
MIGD NONE 18 b ESTIMATE  SUSPENDED SOLIDS mg/l NONE 110.0 a EPA 160.2  Units 6.0 - 9.0 8.00 a EPA 160.1  AATURE 'F NONE 76 a EPA 150.1  ES mg/l 1.00 0.92 a EPA 300.0  mg/l NONE 2 a EPA 300.0  ES mg/l NONE 13.6 a EPA 300.0  ES mg/l NONE 505 a EPA 300.0  EFROTORIED BY  PRACED ANalytical  SUSPENDED SOLIDS TO MANUEL 13.6  BESTIMATE STATISTICS  BEPA 160.2  BEPA 160.2  BEPA 150.1  BEPA 300.0	PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMEN	NTS
SUSPENDED SOLIDS mg/l NONE 10.0 a EPA 160.2  Units 6.0-9.0 8.00 a EPA 150.1  AATURE "F NONE 76 a EPA 300.0  DE mg/l 1.00 0.92 a EPA 300.0  mg/l NONE 2 a EPA 300.0  TES mg/l NONE 505 a EPA 300.0  TES mg/l NONE 505 a EPA 300.0  PROVED BY OWNER  Page A finallytical		NONE	18	σ	ESTIMATE		
AATURE 0113 00.0 0.00 d EPA 170.1  AATURE 76 NONE 76 a EPA 300.0  DE mg/l 0.00 2.7 a EPA 300.0  HORUS mg/l 1.00 0.92 a EPA 300.0  mg/l NONE 2 a EPA 300.0  mg/l NONE 2 a EPA 300.0  mg/l NONE 505 a EPA 300.0  ES mg/l NONE 505 a EPA 300.0  FERFORMED BY  PROVED BY OWNER  PROVED BY OWNER  TROUBLE 10.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	TAL SUSPENDED SOLIDS	NONE	10.0	מ מ	EPA 160.2		
DE	MPERATURE	NONE	76	m i	EPA 170.1		
HORUS mg/l 1.00 0.92 a EPA 365.4  mg/l NONE 2 a EPA 300.0  mg/l NONE 13.6 a EPA 350.1  ES mg/l NONE 505 a EPA 300.0  PERFORMED BY  Page Analytical  SIGNATURE OF ANALYST		8.00	2.7	а	EPA 300.0		
NONE   2   a   EPA 300.0		1.00	0.92	മ	EPA 365.4		
NONE   13.6   a   EPA 350.1		NONE	2	മ	EPA 300.0		
mg/l NONE 505 a EPA 300.0  Pace Analytical    MONE   505   a   EPA 300.0		NONE	13.6	മ	EPA 350.1		
Pace Analytical  SIGNATURE OF ANALYST  SIGNATURE OF ANALYST		NONE	505	מ	EPA 300.0		
Pace Analytical  SIGNATURE OF ANALYST							
Pace Analytical  SIGNATURE OF ANALYST  Pace Analytical	_						
Pace Analytical  SIGNATURE OF ANALYST							
Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical SIGNATURE OF ANALYST							
Pace Analytical							
				SIGNATURE OF AN	ALYST		
	REPORT APPROVED BY OWNER						DATE

DATE							REPORT APPROVED BY OWNER
		ALYST	SIGNATURE OF ANALYST			Pace Analytical	ANALYSES PERFORMED BY
		EPA 300.0	മ	1040	NONE	mg/l	SULFATES
		EPA 350.1	മ	28.0	NONE	mg/l	NH <sub>3</sub> - N
		EPA 300.0	Ø	3.8	NONE	mg/l	NO <sub>3</sub> - N
		EPA 365.4	מ	N/D	_	mg/l	PHOSPHORUS
		EPA 300.0	മ	3.8	8.00	mg/l	FLUORIDE
		EPA 170.1	മ	75	NONE	°F	TEMPERATURE
		EPA 150.1	۵	7.40	6.0 - 9.0	Units	рH
		EPA 160.2	a	6.0	50	_IDS mg/l	TOTAL SUSPENDED SOLIDS
		ESTIMATE	ь	0.18	NONE	MGD	FLOW
TS	REMARKS AND COMMENTS	METHOD	TYPE	OF ANALYSIS	FINAL LIMITS	TERS	PARAMETERS
		ANALYTICAL	SAMPLE	ACTUAL RESULTS	PERMITTED		000000000000000000000000000000000000000
					7/13/2006		DATES OF ANALYSES
					PCS	3Y	SAMPLES COLLECTED BY
					12:45		TIME OF DAY SAMPLED
					7/10/2006		DATE SAMPLED
	ly 31, 2006	THIS REPORT COVERS PERIOD  July 1 Through Ju		ΑB	ONCE/MONTH GRAB	RING	REQUIRED FREQUENCY OF MONITORING OUTFALL #003
Gypsum Stack		FI Missouri Remediation Trust	JASPER	MO-0053627		STRIES Gypsum Stack	Former FARMLAND INDUSTRIES Gypsum Stack
TYPE OF EACH ITY		OWNER	COLINTY	DERMIT NI IMBER			EACH ITY NAME
	w	ER DISCHARGES	STEWAT	SOURCES	JATURAL RE L QUALITY <b>For Non-1</b>	ARTMENT OF N	MISSOURI DEPARTMENT OF NATURAL RESOURCES  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	VATURAL RE L QUALITY I <b>for non-i</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCH.	VATURAL RE L QUALITY <b>I FOR NON-I</b>	WUNICIPAL WA	STEWAT	ER DISCHARGES	(A)	
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remediation Trust	diation Trust	TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB		THIS REPORT COVERS PERIOD  July 1 Through July 31, 2007	ERIOD 1 July 31, 2007	
DATE SAMPLED	7/18/2007					
TIME OF DAY SAMPLED SAMPLES COLLECTED BY	6:40 PCS					
DATES OF ANALYSES	7/19/2007					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
PARAMETERS	FINAL LIMITS	OF ANALYSIS	TYPE	METHOD	REMARKS AND COMMENTS	NTS
<u> </u>	NONE	18	ь	ESTIMATE		
DH Units	6.0 - 9.0	7.20	ນ ໙	EPA 160.2		
MPERATURE	NONE	76	а	EPA 170.1		
FLUORIDE mg/l	8.00	2.1	а	EPA 300.0		
PHOSPHORUS mg/l	1.00	0.83	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	2.3	മ	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	3.2	മ	EPA 350.1		
SULFATES mg/l	NONE	230	Ø	EPA 300.0		
-						
ANALYSES PERFORMED BY Pace Analytical			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE

MISSOURD DE ENCRONMENT OF NATURAL RESOURCES           NUMISSOUR DE ENCRONMENTAL CUALITY           REAL PROPERT FOR NON-MUNICIPAL WASTEWATER DISCHARGES           PRACTIVE DISCHARGES           PRACTIVE DISCHARGES           COMPTON Back         PRACTIVE DISCHARGES           COMPTON Back         PRACTIVE DISCHARGES         PRACTIVE DISCHARGES           CATE SAMPLES COLLECTED BY         PERMITTED         ACTUAL RESULTS         SAMPLE         AMULTICAL         MERITOD         REMANS AND COMMENTS           CAZUM RESIDED SOLIDIS         MOD         NORE         0.80         a         EETHANTE         REMANS AND COMMENTS           FLUORIDE         TP         NORE         0.5         a         EETHANTE         REMANS AND COMMENTS           FOLLOWIS SAMPLE         TROB         NORE         0.5         a         EETHANTE           FLUORIDE         TP         NONE         5.7         a         EETHANTE           FLOORIS SAMPLES         TROB         NONE         5.7         a         EETHANTE           FLOORIS SAMPLES         TROB         NONE         5.7         a         EEA 200.0           FLOORIS SAMPLES         TROB         BEA 300.0							
PRINTINGES   PRINTINGE   PRINTINGES   PRIN	NPDES MONITORING REPORT	T FOR NON-N	MUNICIPAL WA	STEWAT	ER DISCHARGE	co.	
Lanco   Lanc	FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY JASPER	OWNER FI Missouri Remed	diation Trust	TYPE OF FACILITY  Gypsum Stack
MAMPLED  MAPPLED  MAMPLED  MAPPLED  MAP	REQUIRED FREQUENCY OF MONITORING OUTFALL #003	ONCE/MONTH GR	ΑB		THIS REPORT COVERS PE	ERIOD 1 July 31, 2007	
DAY SAMPLED   B.00   PCS	DATE SAMPLED	7/18/2007					
PCS	TIME OF DAY SAMPLED	6:00					
OF ANALYSES         7/19/2007         ANALYSES         7/19/2007         SAMPLE NAVALYTICAL NETHOD         ANALYTICAL NETHOD         REMARKS AND COMMEN           PARAMETERS         MGD         NONE         0.18         b         ESTIMATE         NETHOD         REMARKS AND COMMEN           SUSPENDED SOLIDS         mg/l         5.0         9.0         a         EPA 150.1         EFA 450.2         ANALYSIS         EPA 450.1         EPA 450.1         ANALYSIS         EPA 300.0         ANALYSIS         ANALYSIS         ANALYSIS         ANALYSIS	SAMPLES COLLECTED BY	PCS					
РАКАМЕТERS         PREMITTED         ACTUAL RESULTS         AMPLE ANALYTICAL         ANALYTICAL         REMARKS AND COMMEN           MGD         NONE         0.18         b         ESTIMATE         REMARKS AND COMMEN           SUSPENDED SOLIDS         mg/l         50         9.0         a         EPA 180.2         EPA 180.2           MATURE         "F         NONE         76         a         EPA 180.1         EPA 180.1           DE         mg/l         8.00         5.7         a         EPA 300.0         EPA 300.0           HORUS         mg/l         NONE         3.4         a         EPA 300.0         EPA 300.0           mg/l         NONE         3.4         a         EPA 300.0         EPA 300.0         EPA 300.0           ES         mg/l         NONE         63.9         a         EPA 300.0         EPA 300.0           EPA 300.0         a         EPA 300.0         BEPA 300.0	DATES OF ANALYSES	7/19/2007					
MIGID NONE 0.18 b ESTIMATE  SUSPENDED SOLIDS mg/l 50 9.0 a EPA 180.2  LUNIS 6.0-9.0 7.10 a EPA 180.1  ATURE °F NONE 76 a EPA 300.0  DE mg/l NONE 5.7 a EPA 300.0  HORUS mg/l NONE 3.4 a EPA 300.0  ES mg/l NONE 13.4 a EPA 300.0  ES mg/l NONE 639 a EPA 300.0  EATURE 13.4 a EPA 300.0  EATURE 13.4 a EPA 300.0  EATURE 13.4 a EPA 300.0  EATURE 13.4 a EPA 300.0  EATURE 13.4 BEPA 300.0  EATURE 13.	PARAMETERS	PERMITTED FINAL LIMITS	ACTUAL RESULTS OF ANALYSIS	SAMPLE	ANALYTICAL METHOD	REMARKS AND COMMEN:	NTS
SUSPENDED SOLIDS mg/l 50 9.0 a EPA 160.2  Units 6.0-9.0 7.10 a EPA 150.1  AATURE °F NONE 76 a EPA 300.0  DE mg/l 8.00 5.7 a EPA 300.0  HORUS mg/l NONE 3.4 a EPA 300.0  ES mg/l NONE 6.39 a EPA 300.0  ES mg/l NONE 6.39 a EPA 300.0  ES mg/l NONE 6.39 a EPA 300.0  EPA 300.0 a EPA 300.0  ANOME 1.3.4 a EPA 300.0  BEA 300.0 a EPA 300.0  ANOME 6.39 a EPA 300.0  BEA 300.0 a		NONE	0.18	р	ESTIMATE		
Units 6.0-9.0 7.10 a EPA 150.1  AATURE °F NONE 76 a EPA 170.1  DE mg/l 8.00 5.7 a EPA 300.0  HORUS mg/l 1 0.51 a EPA 300.0  mg/l NONE 3.4 a EPA 300.0  ES mg/l NONE 639 a EPA 300.0  ES mg/l NONE 639 a EPA 300.0  PERCORNED BY PACCE ANALYSIT		50	9.0	മ	EPA 160.2		
NATURE         % NONE         76         a         EPA 170.1           DE         mg/l         8.00         5.7         a         EPA 300.0           HORUS         mg/l         NONE         3.4         a         EPA 305.4         BEPA 305.4           mg/l         NONE         13.4         a         EPA 300.0         BEPA 300.0		6.0 - 9.0	7.10	മ	EPA 150.1		
DE mg/l 8.00 5.7 a EPA 300.0 HORUS mg/l 1 0.51 a EPA 366.4  mg/l NONE 3.4 a EPA 300.0  mg/l NONE 6339 a EPA 300.0  ES mg/l NONE 6339 a EPA 300.0  PERFORMED BY  Page Analytical  SIGNATURE OF ANALYST  Page Analytical		NONE	76	a	EPA 170.1		
HORUS mg/l 1 0.51 a EPA 305.4  mg/l NONE 3.4 a EPA 300.0  mg/l NONE 13.4 a EPA 300.0  ES mg/l NONE 639 a EPA 300.0  EPA 3		8.00	5.7	മ	EPA 300.0		
NONE   3.4   a   EPA 300.0		_	0.51	Ø	EPA 365.4		
NONE   13.4   a   EPA 350.1		NONE	3.4	Ø	EPA 300.0		
mg/l NONE 639 a EPA 300.0		NONE	13.4	a	EPA 350.1		
Pace Analytical  SIGNATURE OF ANALYST  SIGNATURE OF ANALYST		NONE	639	۵	EPA 300.0		
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				SIGNATURE OF AN	ALYST		
							DATE

DATE						REPORT APPROVED BY OWNER
		NALYST	SIGNATURE OF ANALYST			ANALYSES PERFORMED BY
TS	REMARKS AND COMMENTS	ANALYTICAL METHOD	SAMPLE TYPE	ACTUAL RESULTS OF ANALYSIS	PERMITTED FINAL LIMITS	PARAMETERS
						DATES OF ANALYSES
						SAMPLES COLLECTED BY
						TIME OF DAY SAMPLED
						DATE SAMPLED
	ERIOD THROUGH	THIS REPORT COVERS PERIOD				REQUIRED FREQUENCY OF MONITORING
TYPE OF FACILITY		OWNER	COUNTY	PERMIT NUMBER		FACILITY NAME
	co.	ER DISCHARGES	STEWAT	JUNICIPAL WA	VATURAL RE L QUALITY I <b>for non-i</b>	MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY  NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

MISSOURI DEPARTMENT OF NATURAL RESOURCES  DIVISION OF ENVIRONMENTAL QUALITY	NATURAL RE	SOURCES	) 11 12 13			
FACILITY NAME FORMER FARMLAND INDUSTRIES Gypsum Stack		PERMIT NUMBER MO-0053627	COUNTY	OWNER FI Missouri Remediation Trust		TYPE OF FACILITY  Gypsum Stack
REQUIRED FREQUENCY OF MONITORING SHORT CREEK AT MO/KS STATE LINE		ONCE/MONTH GRAB	•	THIS REPORT COVERS PERIOD  June 1 through June	RT COVERS PERIOD through June 30, 2004	
DATE SAMPLED TIME OF DAY SAMPLED	6/1/2004 7:30					
SAMPLES COLLECTED BY	PCS					
DATES OF ANALYSES	6/2/2004					
	PERMITTED	ACTUAL RESULTS	SAMPLE	ANALYTICAL		
TAXAMETER	NONE LIMITS	OF ANALYSIS	ז ת	METHOD	ZEN AZZO COMMEZ-0	2
. SUSPENDED SOLIDS	NONE	10.0	a	EPA 160.2		
pH Units	6.0 - 9.0	7.21	а	EPA 150.1		
TEMPERATURE °F	NONE	69	മ	EPA 170.1		
FLUORIDE mg/l	8.00	1.22	മ	EPA 300.0		
PHOSPHORUS mg/l	1.00	0.25	മ	EPA 365.4		
NO <sub>3</sub> - N mg/l	NONE	0.26	Ø	EPA 300.0		
NH <sub>3</sub> - N mg/l	NONE	4.48	മ	EPA 350.1		
SULFATES mg/l	NONE	223	מ	EPA 300.0		
ANALYSES PERFORMED BY Pace Analytical			SIGNATURE OF ANALYST	ALYST		
REPORT APPROVED BY OWNER						DATE